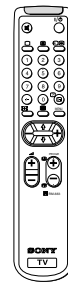


SERVICE MANUAL

FE-1 CHASSIS

<i>MODEL</i>	<i>COMMANDER</i>	<i>DEST</i>	<i>CHASSIS NO.</i>	<i>MODEL</i>	<i>COMMANDER</i>	<i>DEST</i>	<i>CHASSIS NO.</i>
KV-25X5A	RM-883	Italian	SCC-Q06E-A	KV-25X5K	RM-883	OIRT	SCC-Q03E-A
KV-25X5B	RM-883	French	SCC-Q02E-A	KV-25X5L	RM-883	Irish	SCC-Q07B-A
KV-25X5D	RM-883	AEP	SCC-Q04E-A	KV-25X5R	RM-883	OIRT	SCC-Q03F-A
KV-25X5E	RM-883	Spanish	SCC-Q05E-A	KV-25X5U	RM-883	UK	SCC-Q01D-A



TRINITRON® COLOR TV
SONY®

KV-25X5

ITEM MODEL	Television System	Stereo System	Channel Coverage	Color System
Italian	B/G/H	GERMAN Stereo	ITALIA VHF : A-H2 (C) UHF : 21-69 PAL B/G/H VHF : E2-E12 UHF : E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10	PAL NTSC4.43, NTSC3.58 (VIDEO IN)
French	B/G/H, D/K, L, I	GERMAN/NICAM Stereo	L VHF : F02-F10 UHF : F21-F60 CABLE : B-Q B/G/H VHF : E2-E12 UHF : E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF : A-H2 (C) UHF : 21-69 I UHF : B21-B69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
AEP	B/G/H, D/K	GERMAN Stereo	PAL B/G/H VHF : E2-E12 UHF : E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF : A-H2 (C) UHF : 21-69 D/K VHF : R01-R12 UHF : R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
Spanish	B/G/H, D/K	GERMAN/NICAM Stereo	PAL B/G VHF : E2-E12 UHF : E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF : A-H2 (C) UHF : 21-69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
OIRT	B/G/H, D/K	KV-25X5K GERMAN/NICAM Stereo KV-25X5R GERMAN Stero	B/G/H VHF : E2-E12 UHF : E21-E69 CABLE TV (1) : S1-S41 D/K VHF : R01-R12 UHF : R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
Irish	I	NICAM Stereo	VHF : A-C, D-J VHF : 21-69 CABLE CHANNELS S1-S20 HYPERBAND S21-S41	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
UK	I	NICAM Stereo	UHF : B21-B69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)

MODEL	25X5A	25X5B	25X5D	25X5E	25X5K	25X5L	25X5R	25X5U
Power Consumption	89W	97W	97W	97W	97W	139W	97W	139W

[PICTURE TUBE] Super Trinitron
Approx. 63cm (25 inches)
(Approx. 59cm picture measured diagonally)
110 degree deflection

Input/Output Terminals

[REAR]

➡ 1/1 → 21-pin Euro connector (CENELEC standard).

- Inputs for Audio and Video signals.
- Inputs for RGB.
- Outputs of TV Video and Audio signals.

➡ 2/ → 21-pin Euro connector.

- inputs for Audio and Video signals.
- inputs for S Video.
- outputs for Audio and Video signals (selectable).

➡ Phono Jack

- Outputs for Audio Signals

[FRONT]

➡ 3 Video input - phono jack

➡ 3 Audio inputs - phono jacks

➡ S3 S Video input 4 pin DIN

➡ Headphone jacks : stereo minijack

Sound output 2 x 20W (Music Power)

Power requirements 220 - 240V

Dimensions Approx 593x502x506mm

Weight Approx 33.2kg

Supplied accessories RM-883 Remote Commander (1)
IEC designated R6 battery (1)
NICAM*, FASTEXT, TOPTXT
*(KV-25X5B/25X5E/25X5K/25X5L/25X5U only)

[RM-883]

Remote control system Infrared control

Power requirements 1.5V dc
1 battery IEC designation
R6 (size AA)


Dimensions Approx 65x225x21mm (w/h/d)

Weight Approx 157g (Not including battery)

Design and specifications are subject to change without notice.

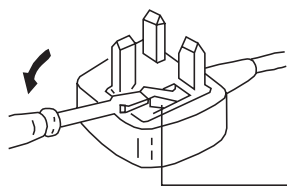
Model Name Item	KV-25X5A	KV-25X5B	KV-25X5D	KV-25X5E	KV-25X5K	KV-25X5L	KV-25X5R	KV-25X5U
Pal Comb	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
PIP	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
RGB Priority	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
Woofers Box	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Scart 1	ON	ON	ON	ON	ON	ON	ON	ON
Scart 2	ON	ON	ON	ON	ON	ON	ON	ON
Front in (3)	ON	ON	ON	ON	ON	ON	ON	ON
Scart 4	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Projector	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
AKB in 16:9 mode	ON	ON	ON	ON	ON	ON	ON	ON
Norm B/G	ON	ON	ON	ON	ON	OFF	ON	OFF
Norm I	OFF	ON	OFF	OFF	OFF	ON	OFF	ON
Norm D/K	OFF	ON	ON	ON	ON	OFF	ON	OFF
Norm AUS	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Norm L	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
Norm SAT	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Norm M	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Teletext	ON	ON	ON	ON	ON	ON	ON	ON
Nicam Stereo	OFF	ON	OFF	ON	ON	ON	OFF	ON
Language Preset	Italian	French	German	Spanish	OIRT	English	OIRT	English

WARNING (KV-25X5L / KV-25X5U only)

The flexible mains lead is supplied connected to a **B.S. 1363** fused plug having a fuse of **5 AMP** capacity. Should the fuse need to be replaced, use a **5 AMP FUSE** approved by **ASTA** to **BS 1362**, ie one that carries the  mark.

IF THE PLUG SUPPLIED WITH THIS APPLIANCE IS NOT SUITABLE FOR THE OUTLET SOCKETS IN YOUR HOME, IT SHOULD BE CUT OFF AND AN APPROPRIATE PLUG FITTED. THE PLUG SEVERED FROM THE MAINS LEAD MUST BE DESTROYED AS A PLUG WITH BARED WIRES IS DANGEROUS IF ENGAGED IN A LIVE OUTLET SOCKET.

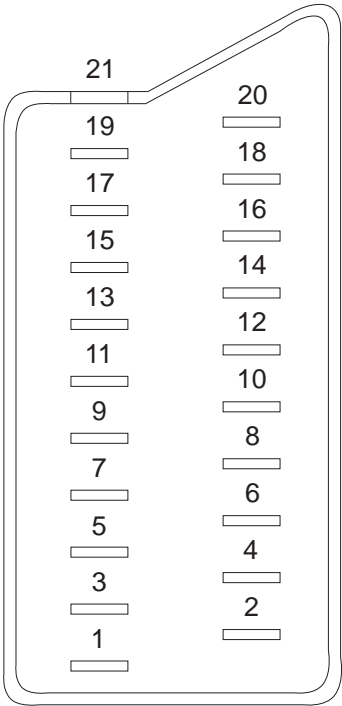
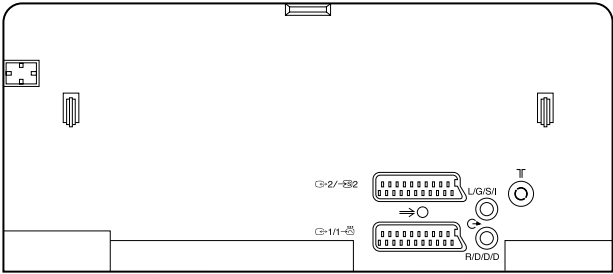
When an alternative type of plug is used it should be fitted with a **5 AMP FUSE**, otherwise the circuit should be protected by a **5 AMP FUSE** at the distribution board.



How to replace the fuse.
Open the fuse compartment with a screwdriver blade and replace the fuse.

FUSE

21 pin connector (↔ 1/1→ , ↔ 2/ →S 2)



Pin No	1	2	4	Signal	Signal level
1	○	○	○	Audio output B (right)	Standard level : 0.5V rms Output impedance : Less than 1kohm*
2	○	○	○	Audio output B (right)	Standard level : 0.5V rms Output impedance : More than 10kohm*
3	○	○	○	Audio output A (left)	Standard level : 0.5V rms Output impedance : Less than 1kohm*
4	○	○	○	Ground (audio)	
5	○	○	○	Ground (blue)	
6	○	○	○	Audio input A (left)	Standard level : 0.5V rms Output impedance : More than 10kohm*
7	○	●	●	Blue input	0.7 +/- 3dB, 75 ohms positive
8	○	○	○	Function select (AV control)	High state (9.5-12V) : Part mode Low state (0-2V) : TV mode Input impedance : More than 10K ohms Input capacitance : Less than 2nF
9	○	○	○	Ground (green)	
10	○	○	○	Open	
11	○	●	●	Green	Green signal : 0.7 +/- 3dB, 75 ohms, positive
12	○	○	○	Open	
13	○	○	○	Ground (red)	
14	○	○	○	Ground (blanking)	
15	○	-	-	Red input	0.7 +/- 3dB, 75 ohms, positive
	-	○	○	(S signal Chroma input)	0.3 +/- 3dB, 75 ohms, positive
16	○	●	●	Blanking input (Ys signal)	High state (1-3V) Low state (0-0.4V) Input impedance : 75 ohms
17	○	○	○	Ground (video output)	
18	○	○	○	Ground (video input)	
19	○	○	○	Video output	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
20	○	-	-	Video input	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
	-	○	○	Video input Y (S signal)	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
21	○	○	○	Common ground (plug, shield)	

○ Connected ● Not Connected (open) * at 20Hz - 20kHz

Pin No	Signal	Signal level
1	Ground	
2	Ground	
3	Y (S signal) input	1V+/- 3dB 75 ohm, positive Sync 0.3V -3/+10dB
4	C (S signal) input	0.3V+/- 3dB 75 ohm, positive Sync

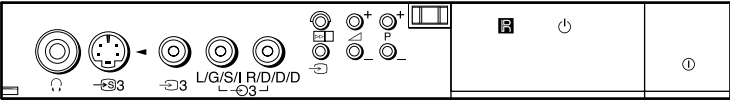


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CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR THE CARBON PAINTED ON THE CRT, AFTER REMOVAL OF THE ANODE CAP

WARNING !!

AN ISOLATING TRANSFORMER SHOULD BE USED DURING ANY SERVICE WORK TO AVOID POSSIBLE SHOCK HAZARD DUE TO LIVE CHASSIS. THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARKED  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.


ATTENTION

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION !!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÂSSIS SOUS TENTION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÂSSIS DE CE RÉCEPTEUR EST DIRECTMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ !!

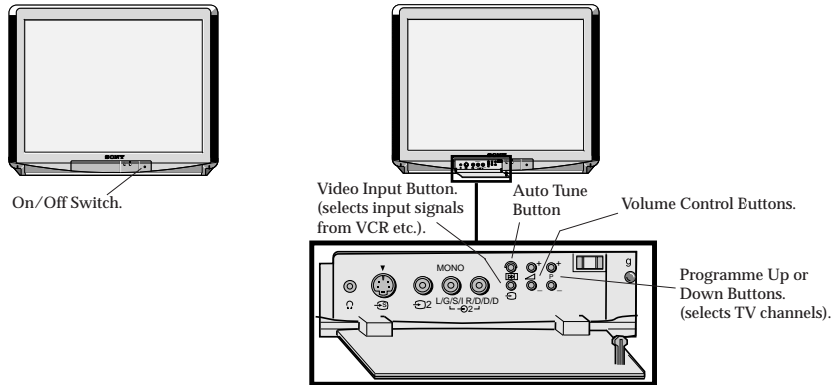
LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MARQUE  SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIÈCES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÈCURITÉ DU FONCTIONNEMENT, NE LES REMPLACER QUE PAR DES COMPSANTS SONY DONT LE NUMÈRO DE PIÈCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÈMENTS PUBLIÉS PAR SONY.

SECTION 1 GENERAL

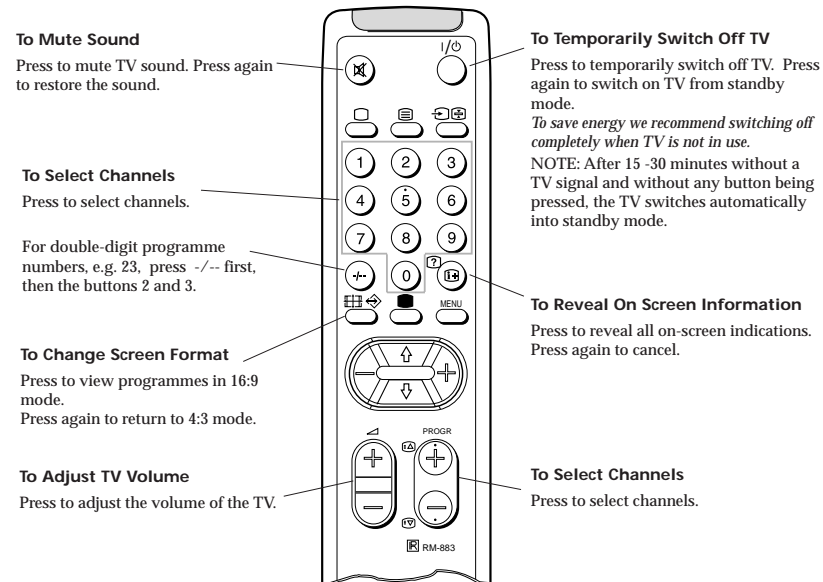
The operating instructions mentioned here are partial abstracts from the Operating Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

Basic TV Features

Overview of TV Buttons



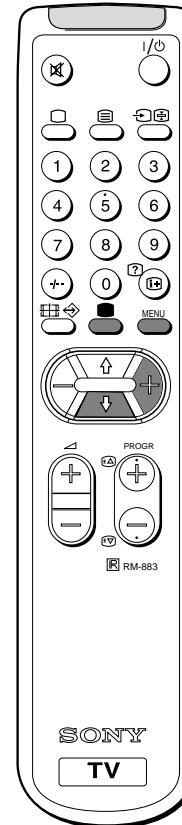
Overview of Remote Control Buttons



Additional TV Features

Using Select Mode

You can select different preset picture and sound modes.

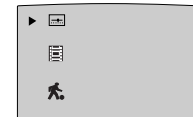
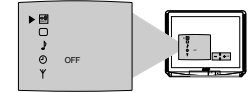


- 1 Press the MENU button on the remote control to display the menu on the TV screen.
- 2 With the cursor pointing at the symbol on the TV screen as shown, press the yellow button.
- 3 Press the blue button to select the desired mode:
 - reverts to settings made in "Adjusting the Picture and Sound" sections of the manual
 - for films
 - for programmes broadcast live
- 4 Press the MENU button to remove the menu display from the TV screen.

Note: The mode selected in step 3 is now stored.

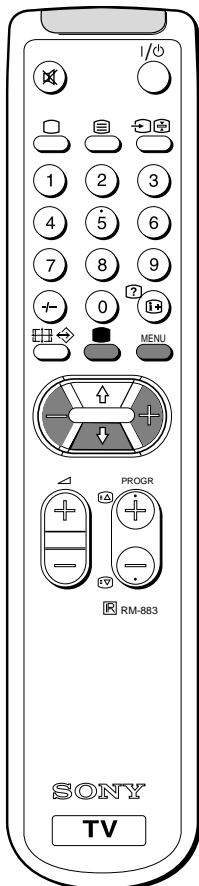
Changing Modes Quickly




- 1 Press the button on the remote control to display the three different modes.
- 2 Press the button again to select your desired mode.











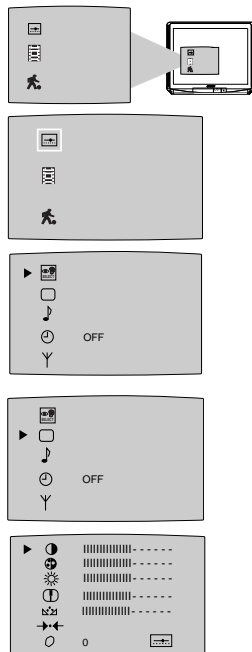
Adjusting the Picture

Although the picture is adjusted at the factory, you can modify it to suit your own requirement.



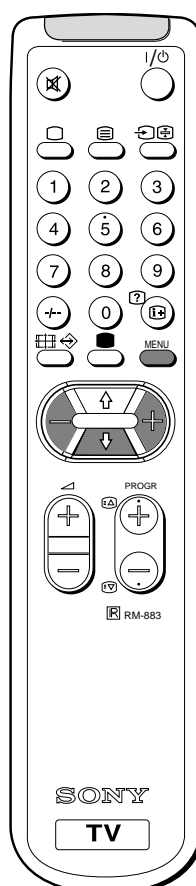
- 1 Press the  button on the remote control to display the three different modes on the TV screen.
- 2 Press the  button to highlight the user mode symbol as shown.
- 3 Press the MENU button to display the menu on the TV screen.
- 4 Press the blue button on the control to select the  symbol on the TV screen then press the yellow button.
- 5 Press the blue button to select the item you wish to change (see below).
- 6 Press the red or yellow button to alter the selected item.
- 7 Press the MENU button to remove the menu display from the TV screen.




Symbol	Item
	• Contrast
	• Colour
	• Brightness
	• Sharpness
	• Hue control (only for NTSC video signals)
	• Reset - resets to factory preset picture level
	• Picture rotation - adjusts picture tilt (only for KV-29X5U model)
	• Represents the mode selected in the "Using Select Mode" section.









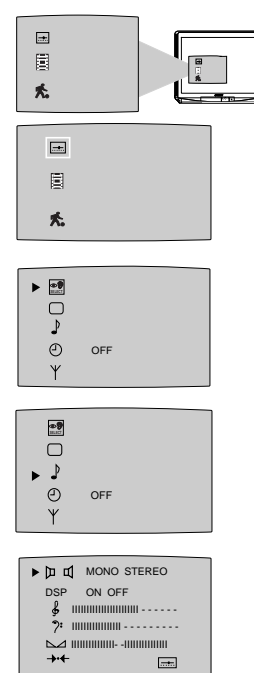
Adjusting the Sound

Although the sound is adjusted at the factory, you can modify it to suit your own requirement.



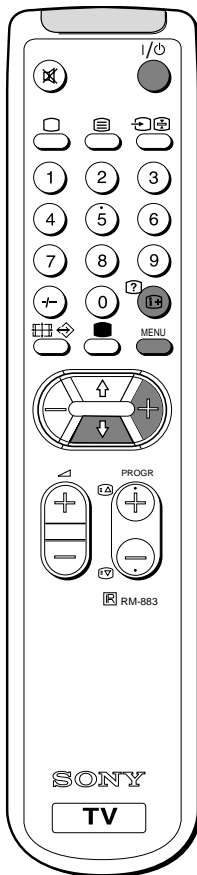
- 1 Press the  button on the remote control to display the three different modes on the TV screen.
- 2 Press the  button to highlight the user mode symbol as shown.
- 3 Press the MENU button to display the menu on the TV screen.
- 4 Press the blue button to select the  symbol on the TV screen then press the yellow button.
- 5 Press the blue button to select the item you wish to change (see below).
- 6 Press the red or yellow button to alter the selected item.
- 7 Press the MENU button to remove the menu display from the TV screen.


Symbol	Item
	• Mono sound/Stereo sound A: Channel 1 sound/B: Channel 2 sound (to select your desired language from a dual sound broadcast)
DSP	• On/Off (digital sound processor)
	• Treble
	• Bass
	• Balance
	• Reset (resets to factory preset sound level)
	• Represents the mode selected in the "Using Select Mode" section of the manual.



Using the Sleep Timer



The TV may be set to switch automatically to the standby mode after a length of time chosen by you. You may set the time in 15 minute steps up to 4 hours.

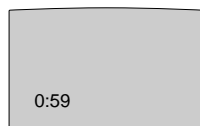
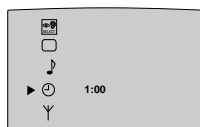
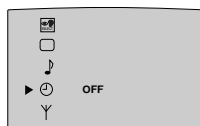
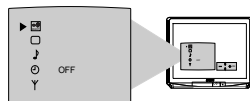


- 1 Press the MENU button on the remote control to display the menu on the TV screen.
- 2 Press the blue button on the control to select the  symbol on the TV screen, then press the yellow button.
- 3 Press the yellow button repeatedly until the required amount of time delay appears on the screen.
- 4 Once the time delay has been selected, press the MENU button to remove the on-screen display.

One minute before standby, the display shown appears on the screen.

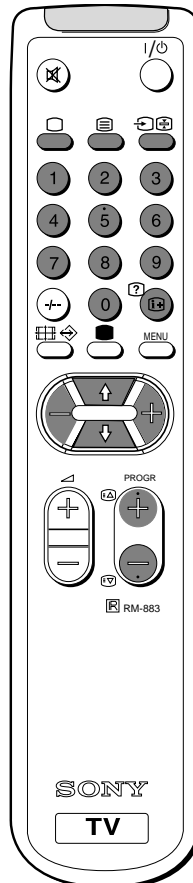
Notes:

- When watching TV, press the  button to display time remaining.
- To return to normal operation from standby mode, press the  button.





Viewing Teletext

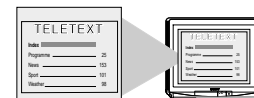
Teletext is an information service transmitted by most TV stations.



Selecting Teletext



- 1 Press a number button on the remote control to select the channel which carries the teletext service you wish to receive.
- 2 Press the  button on the remote control to switch on teletext.
- 3 Input three digits for the page number using the numbered buttons on the control.
- 4 Press the  button to switch off teletext.

Note: Teletext errors may occur if the broadcasting signals are weak.



Using Other Teletext Functions



To Superimpose Teletext on to the TV

Press  once in teletext mode or twice in TV mode to superimpose teletext on to the TV screen.
Press  again to cancel teletext mode.


To Move to Next or Preceding Page

Press PROGR +/- on the remote control to select the previous or next page.

To Freeze a Teletext Page

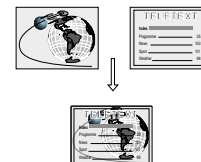
Press  on the control to freeze the page.
Press  again to cancel the freeze.

Revealing concealed information (eg: answers to a quiz).

Press  to reveal information.
Press again to conceal the information.

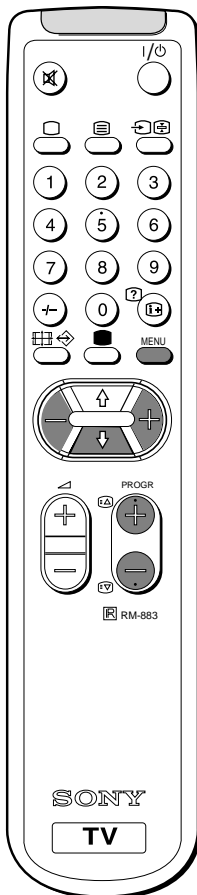
Using colour buttons to access pages (Fastext)

When the colour coded menu appears at the bottom of a page, press the colour button (green, red, yellow or blue) to access the corresponding page.

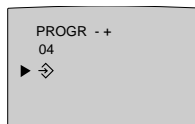
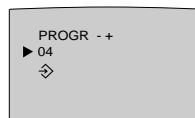
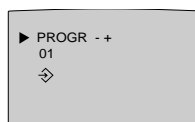
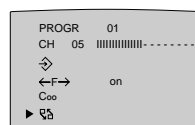
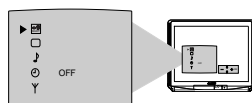


Exchanging Programme Positions

After tuning you may wish to change the order in which the channels appear on the TV. You may wish for example to exchange the channel on programme number 8 with the channel on programme number 4.

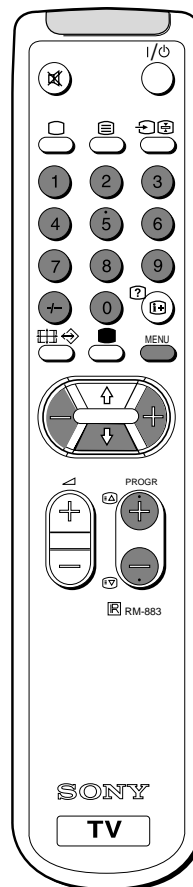


- 1 Press the MENU button on the remote control.
- 2 Press the blue button on the control to select γ on the TV screen, then press the yellow button.
- 3 Press the blue button to select γ then press the yellow button.
- 4 With the cursor pointing at PROGR on the TV screen as shown, press PROGR + or - button until the channel you wish to rearrange appears on screen, then press the blue button once.
- 5 Press the red or yellow button to select the new programme number (e.g. PROGR 04) for your selected channel.
- 6 Press the blue button to select γ then press the yellow button to exchange the channels.
- 7 Repeat steps 4 to 6 if you wish to change the order of the other channels on your TV, then press MENU to return to normal TV screen.
- 8 Press the PROGR+/- button to view your selected channels on their new programme numbers.

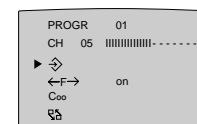
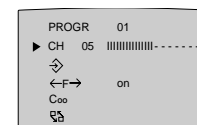
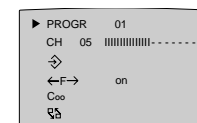
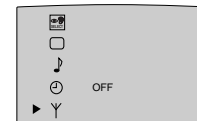
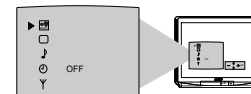


Manually Tuning the TV

You have already tuned the TV to receive all available channels using the 'Automatically Tuning the TV' procedure at the start of this manual. You can however carry out this operation manually using the following instructions.

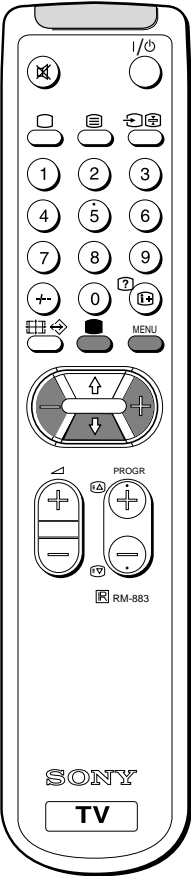


- 1 Press the MENU button on the remote control to display the menu on the TV screen.
- 2 Press the blue button to select the γ symbol on the TV screen then press the yellow button.
- 3 With the cursor pointing at PROGR on the TV screen as shown, press PROGR + or - button on the remote control to allocate a programme number to the channel (eg PROGR 01). For double digit numbers e.g. 55, press the -/-- button on the remote control then the corresponding numbered buttons.
- 4 Press the blue button to select the tuning bar scale then press the yellow or red button once to start the channel search. (Yellow to search up the scale or red to search down). When a channel is found it appears on the TV screen.
- 5 If you do not wish to store this channel on the programme number you selected, press the yellow or red button to continue searching for the desired channel.
- 6 If this is the channel you wish to store, press the blue button to select the γ symbol on the screen then press the yellow button to store.
- 7 Repeat steps 3 to 6 if you wish to store more channels then press the MENU button to remove the menu from the TV screen.

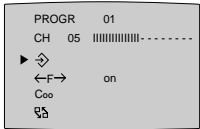
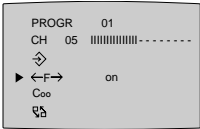
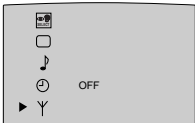
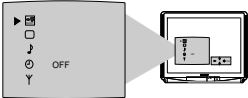


Fine-Tuning Channels

If a channel is slightly off tune, you can use this fine tune procedure to obtain a better picture reception.



- 1 With the channel you wish to fine-tune on the screen, press the MENU button on the remote control. The menu display appears on the TV screen.
- 2 Press the blue button on the remote control to select the Y symbol on the TV screen then press the yellow button.
- 3 Press the blue button to select the ←F→ symbol on the TV screen then press the red or yellow button to adjust the tuning.
- 4 Press the blue button to select the ⇄ symbol on the TV screen then press the yellow button to store.
- 5 Press the MENU button to remove the menu from the TV screen.



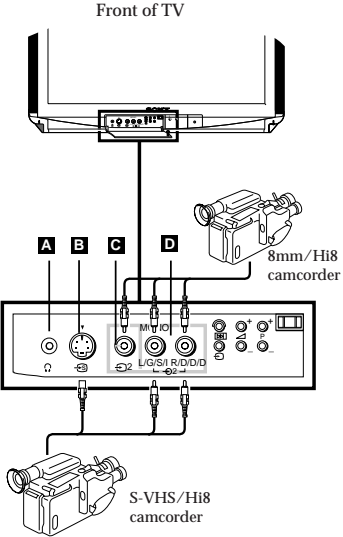
Using Optional Equipment

You can connect optional audio or video equipment to your TV, such as a VCR, a camcorder or video games as shown.

Select and View the Input Signal

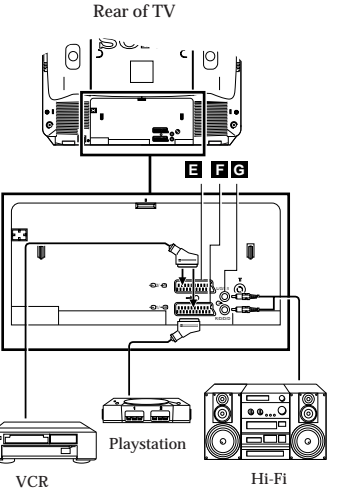
- 1 Connect your equipment to the designated TV socket.
 - 2 Press the ⇄ button repeatedly on your remote control until the correct input symbol appears on the TV screen.
- | Symbol | Input signals |
|--------|--|
| ⇄1 | • Audio/video input signal through the Euro AV connector F |
| ⇄2 | • RGB input signal through the Euro AV connector F |
| ⇄3 | • Audio/video input signal through the Euro AV connector E or the phono sockets C and D |
| ⇄4 | • S video input signal through the socket B . |
- 3 Switch on the connected equipment.
 - 4 To return to normal TV picture, press the □ button on the remote control.

Note: To avoid picture distortion, do not connect equipment to the **B**, **C** or **E** connectors at the same time.














Additional Information

- Connecting a VCR**
We recommend you tune in the VCR signal to TV programme number '0' using the 'Manually Tuning in the TV' section of this instruction manual.
- Connecting Headphones**
Plug in your headphones to the socket **A** on the front of the TV set.
- Connecting Decoders**
Plug in decoders to the socket **F** on the rear of the TV.
- Connecting to External Audio Equipment**
Plug in your Hi-Fi equipment to the **G** sockets on the rear of the TV if you wish to amplify the audio output from the TV.












Troubleshooting

Here are some simple solutions to problems which may affect the picture and sound.

Problem	Solution
No picture (screen is dark), no sound	<ul style="list-style-type: none">• Plug the TV in.• Press the  button on the front of TV.• If the  indicator is on press  button or a programme number button on the remote control.• Check the aerial connection.• Check that the selected video source is on.• Turn the TV off for 3 or 4 seconds and then turn it on again using the  button on the front of the TV.
Poor or no picture (screen is dark), but good sound.	<ul style="list-style-type: none">• Using the MENU system, select the Picture Adjustment display. Adjust the brightness, picture and colour balance levels.• From the Picture Adjustment display select  to return to the factory settings.
Poor picture quality when watching a RGB video source.	<ul style="list-style-type: none">• Press the  button repeatedly on the remote control until the RGB symbol  is displayed on the screen.
Good picture, no sound	<ul style="list-style-type: none">• Press the  +/- button on the remote control.• If  is displayed on the screen, press the  button on the remote control.
No colour on colour programmes	<ul style="list-style-type: none">• Using the MENU system, select the Picture Adjustment display. Adjust the colour balance.• From the Picture Adjustment display select  to return to the factory settings.
Distorted picture when changing programmes or selecting teletext	<ul style="list-style-type: none">• Turn off any equipment connected to the 21 pin Euro connector on the rear of the TV.
Remote control does not function	<ul style="list-style-type: none">• Replace the batteries.

- If you continue to have these problems, have your TV serviced by qualified personnel.
- NEVER open the casing yourself.

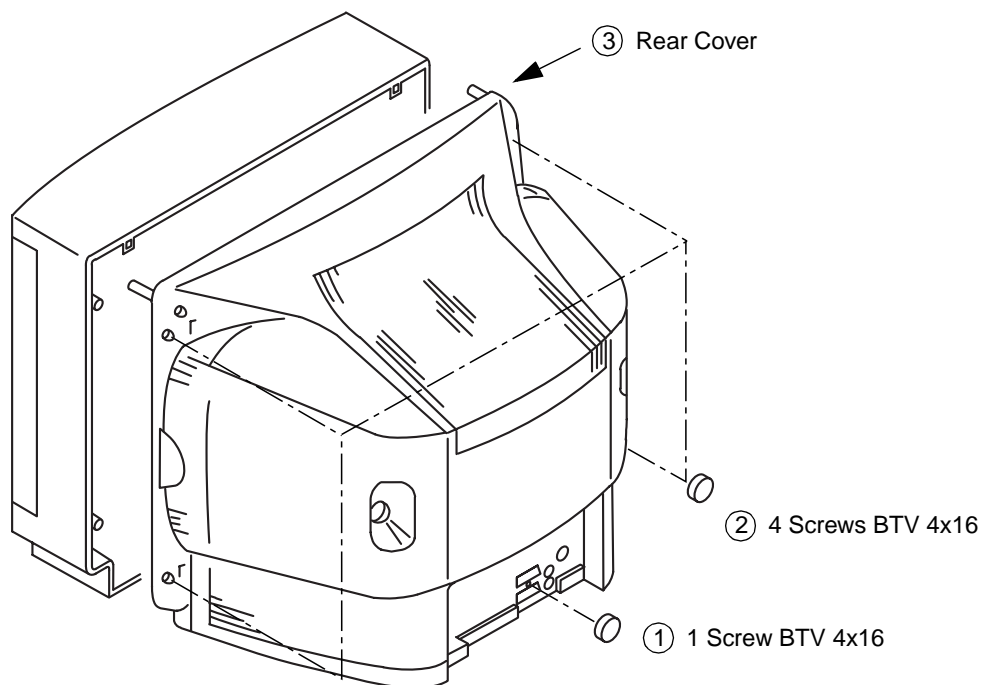
Specifications

TV system	I
Colour system	PAL
	NTSC 3.58, 4.43 (only Video In)
Channel coverage	
UHF:	B21-B69
Picture tube	
KV-25X5U:	Super Trinitron
	Approx. 63 cm (25 inches) (Approx. 59 cm picture measured diagonally), 100° deflection
KV-29X5U:	Super Trinitron
	Approx. 72 cm (29 inches) (Approx. 68 cm picture measured diagonally), 100° deflection
Inputs	
• Rear Terminals	
 1 / 	21-pin Euro connector (CENELEC standard) including audio/video input, RGB input, TV audio/video output
 2 / 	21-pin Euro connector (CENELEC standard) including audio/video input, S-video input, Monitor audio/video output
• Front Terminals	
 2	video input - phono jack
 2	audio inputs - phono jacks
	S video input - 4 pin DIN
Outputs	
	Headphones jack - minijack stereo
	Audio outputs (variable) - phono jacks
Sound output:	
	2 x 10 W (RMS)
Power consumption	
KV-25X5U:	139 W
KV-29X5U:	158.5 W
Standby Power consumption	
	1 W
Dimensions (wxhxd)	
KV-25X5U:	Approx. 593 x 502 x 506 mm
KV-29X5U:	Approx. 676 x 557 x 525 mm
Weight	
KV-25X5U:	Approx. 33.2 kg
KV-29X5U:	Approx. 43.5 kg
Accessories supplied	
	RM-883 Remote Control (1)
	IEC designated batteries (2)
Other features	
	TELETEXT, Fastext

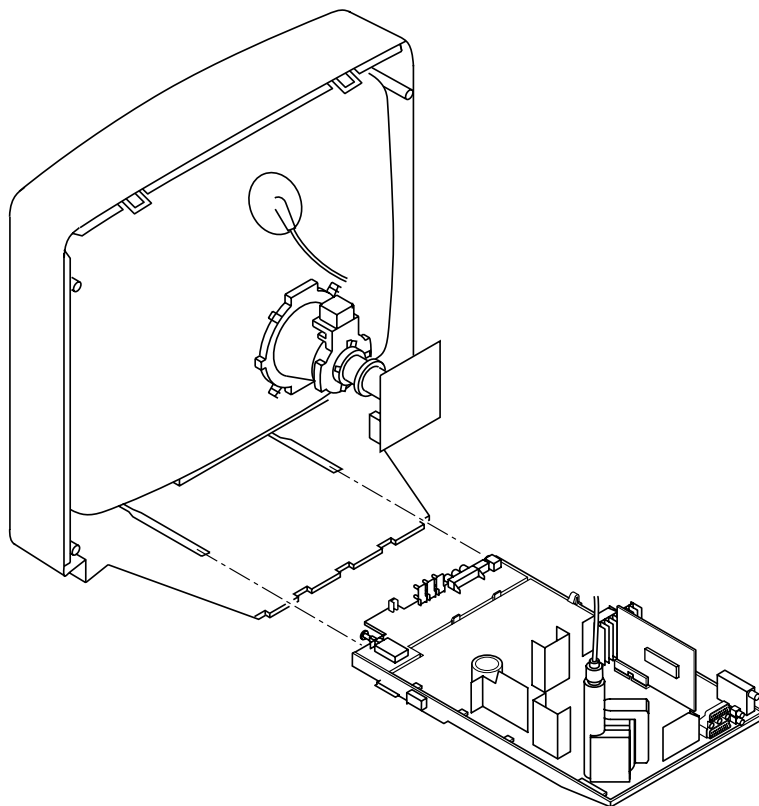
Design and specifications are subject to change without notice.

SECTION 2 DISASSEMBLY

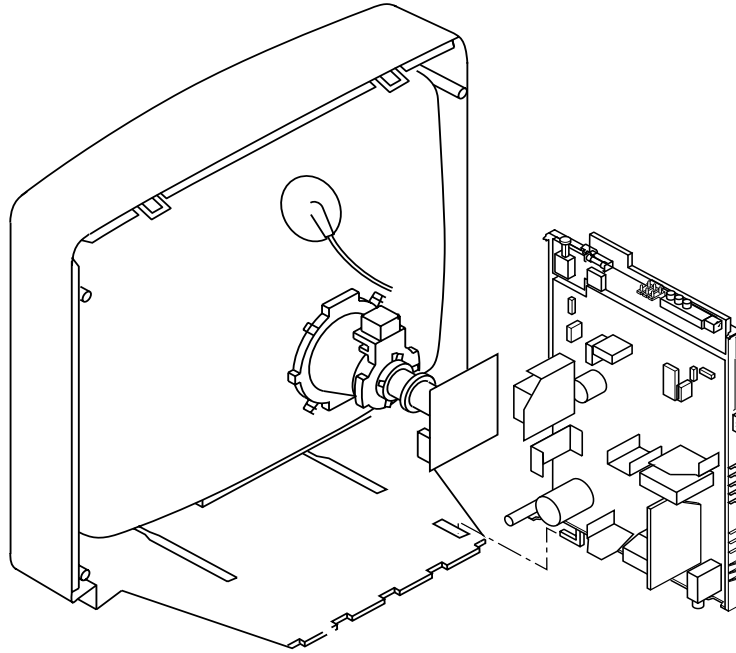
2-1. REAR COVER REMOVAL



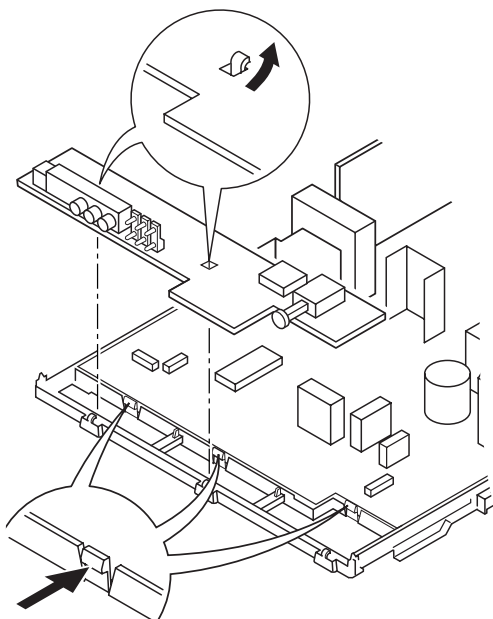
2-2. CHASSIS ASSY REMOVAL



2-3. SERVICE POSITION

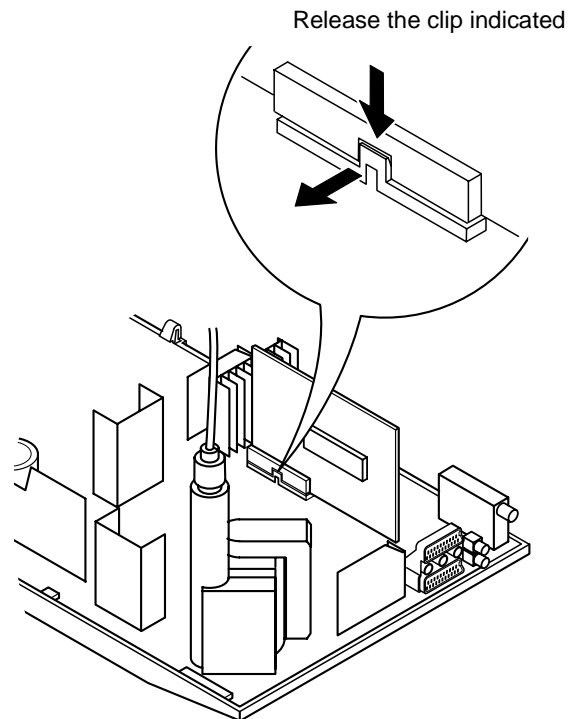


2-4. H1 BOARD REMOVAL

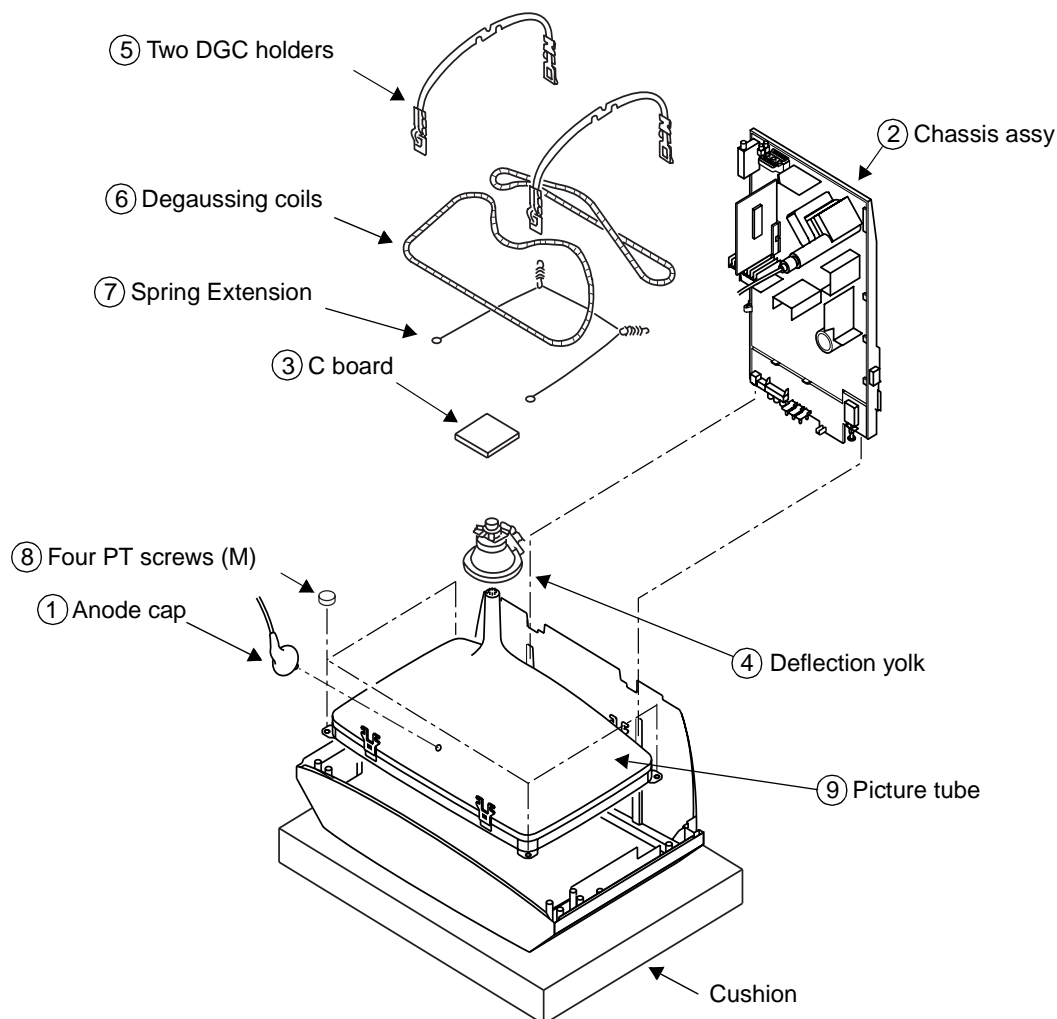


To release, push the claws in the direction of the arrow as indicated.

2-5. S1 BOARD REMOVAL



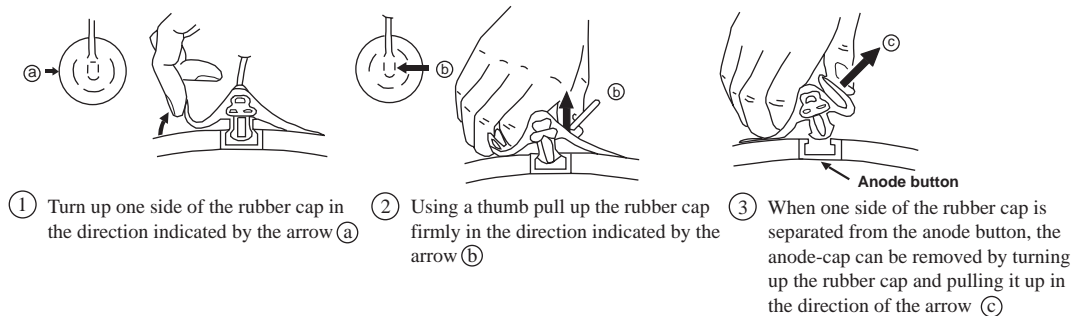
2-6. PICTURE TUBE REMOVAL



• REMOVAL OF ANODE-CAP

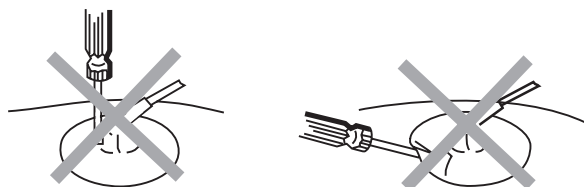
Note : Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

* REMOVING PROCEDURES.



• HOW TO HANDLE THE ANODE-CAP

- ① To prevent damaging the surface of the anode-cap do not use sharp materials.
- ② Do not apply too great a pressure on the rubber, as this may cause damage to the anode connector.
- ③ A metal fitting called a shatter hook terminal is fitted inside the rubber cap. Do not turn the rubber foot over excessively this may cause damage if the shatter hook sticks out.



REMOVAL AND REPLACEMENT OF THE MAIN-BRACKET
BOTTOM PLATES.


(1) REMOVING THE PLATES

In the event of servicing being required to the solder side of the A Board printed wiring board, the bottom plates fitted to the main chassis bracket require to be removed.

This is performed by cutting the gates with a sharp wire cutter at the locations shown and indicated by arrows.

Note :There are 2 plates fitted to the main bracket and secured by 4 gates.

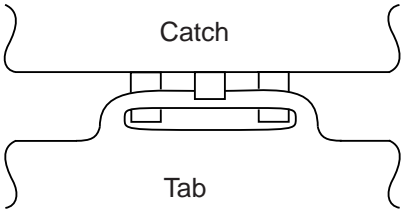
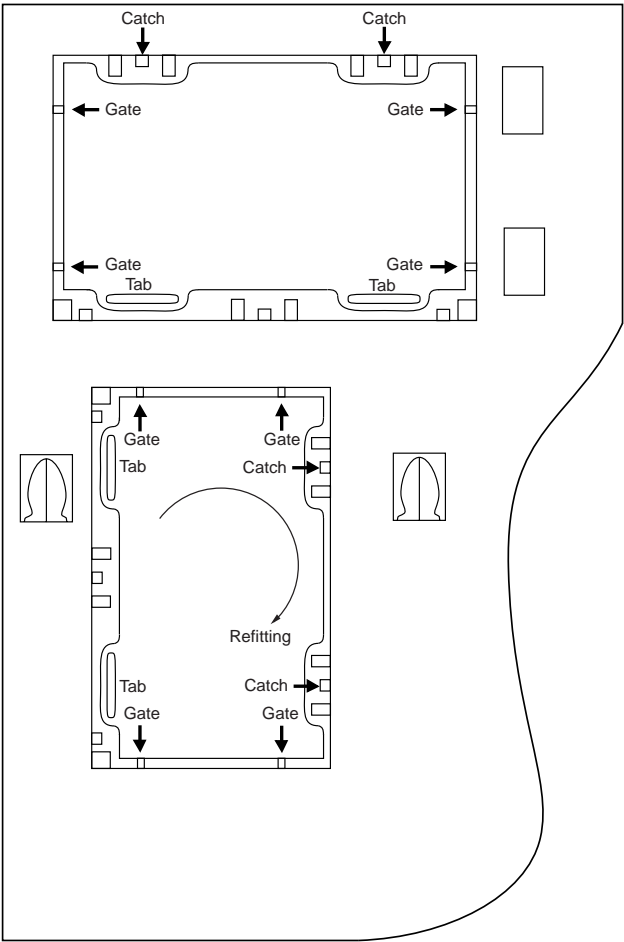
Only remove the necessary plate to gain access to the printed wiring board.

 For safety reasons, on no account should the plates be removed and not refitted after servicing.

(2) REFITTING THE PLATES

Because the plates differ in size it is important that the correct plates are refitted in their original location.

Please note that the plates need to be rotated 180 degrees from the cut position to allow the tabs to be fitted in the catch positions.



SECTION 3 SET-UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there are specific instructions to the contrary, carry out these adjustments with the rated power supply.
- Unless there are specific instructions to the contrary, set the controls and switches to the following settings :

Contrast 80% [or remote control normal]
 Brightness 50%

Carry out the following adjustments in this order :

- 3-1. Beam Landing
- 3-2. Convergence
- 3-4. Focus
- 3-3. White balance

Note : Test equipment required

1. Color bar/pattern generator.
2. Degausser.
3. Oscilloscope.
4. Digital multimeter.
5. DC Power supply.

Preparation:

1. In order to reduce the influence of geomagnetism on the set's picture tube, face it in an easterly or westerly direction.
2. Switch on the TV set's power and degauss with the degausser.

3-1. BEAM LANDING

1. Input an all-white signal from the pattern generator. Set the Contrast and Brightness to normal.
2. Set the pattern generator raster signal to all Red.
3. Move the deflection yolk forward and adjust with the purity control so that the Red is at the centre and the Blue and Green take up equally sized areas on each side of the screen. [See Fig.3-1 - 3-3].
4. Move the deflection yolk forward and adjust so that the entire screen becomes Red. [See Fig.3-1].
5. Switch the raster signal to Blue, then to Green and verify the purity condition.
6. When the position of the deflection yolk has been determined, fasten the deflection yolk with the screws.
7. If the beam does not land correctly in all the corners, use magnets to correct it. [See Fig.3-4].

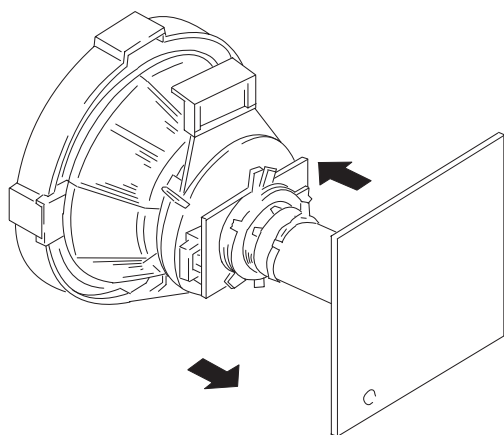


Fig. 3-1

Fig. 3-2

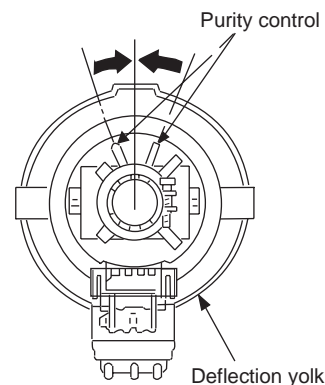


Fig. 3-3

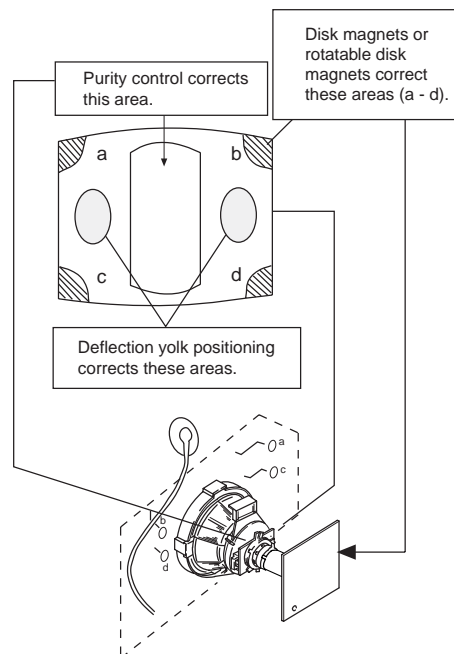
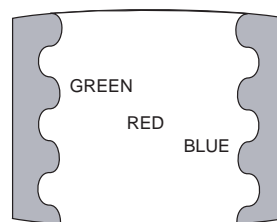


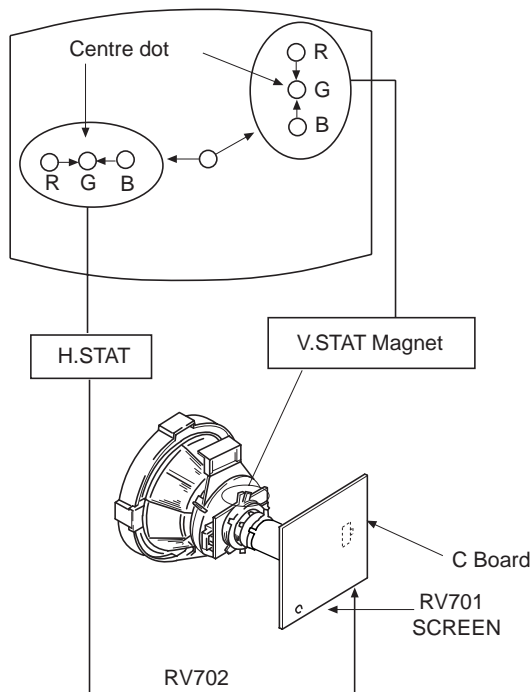
Fig. 3-4

3-2. CONVERGENCE

Preparation:

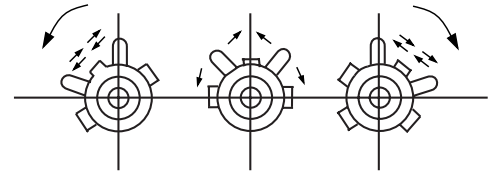
- Before starting this adjustment, adjust the focus, horizontal size and vertical size.
- Minimize the Brightness setting.
- Input a dot pattern from the pattern generator.

(1) Horizontal and vertical static convergence

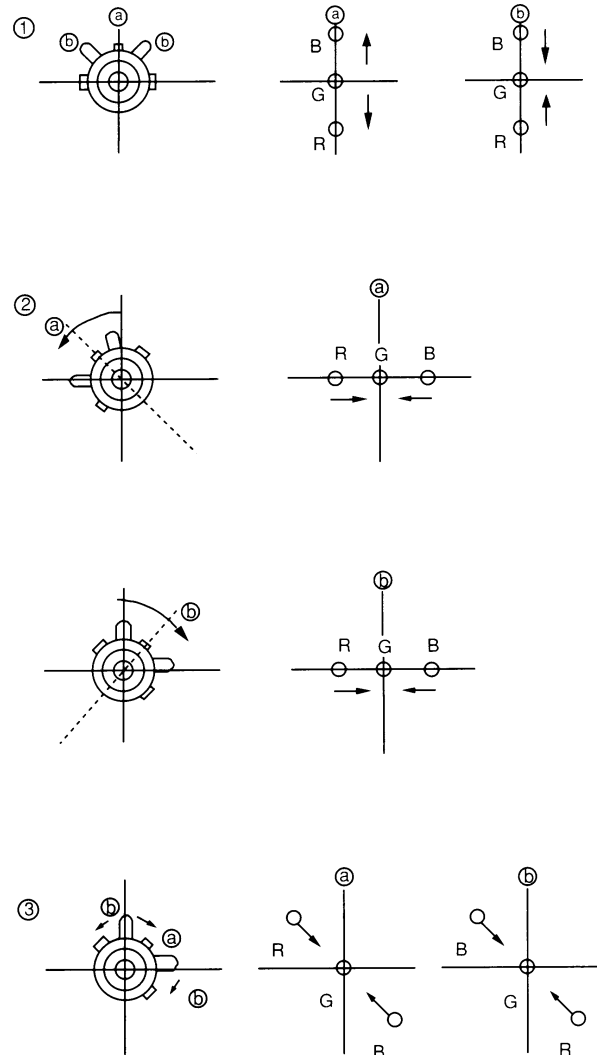


1. [Moving horizontally], adjust the H.STAT control so that the Red, Green and Blue points are on top of each other at the centre of the screen.
2. [Moving vertically], adjust the V.STAT magnet so that the Red, Green and Blue points are on top of each other at the centre of the screen.
3. If the H.STAT variable resistor is unable to bring the Red, Green and Blue points together at the centre of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner indicated below. [In this case, the H.STAT variable resistor and the V.STAT magnet influence each other].

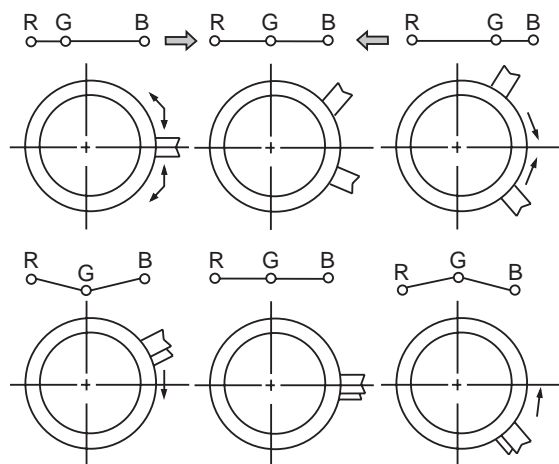
- Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.



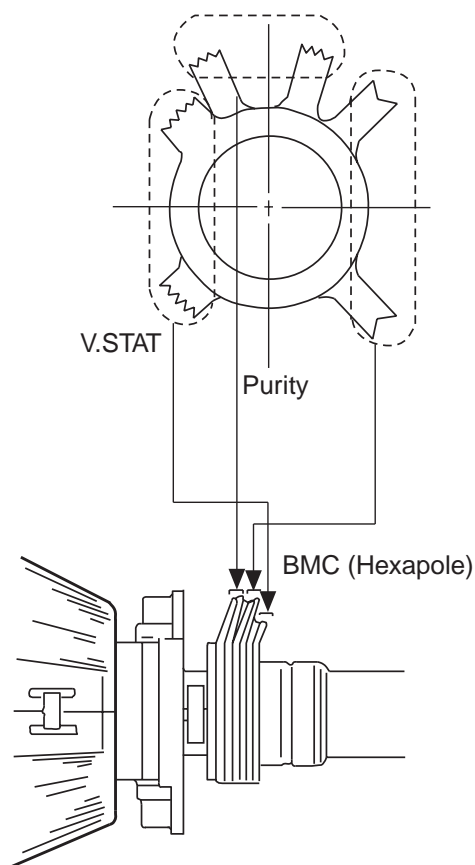
4. If the V.STAT magnet is moved in the direction of the (a) and (b) arrows, the Red, Green and Blue points move as indicated below.



(2) Operation of the BMC (Hexapole) magnet.



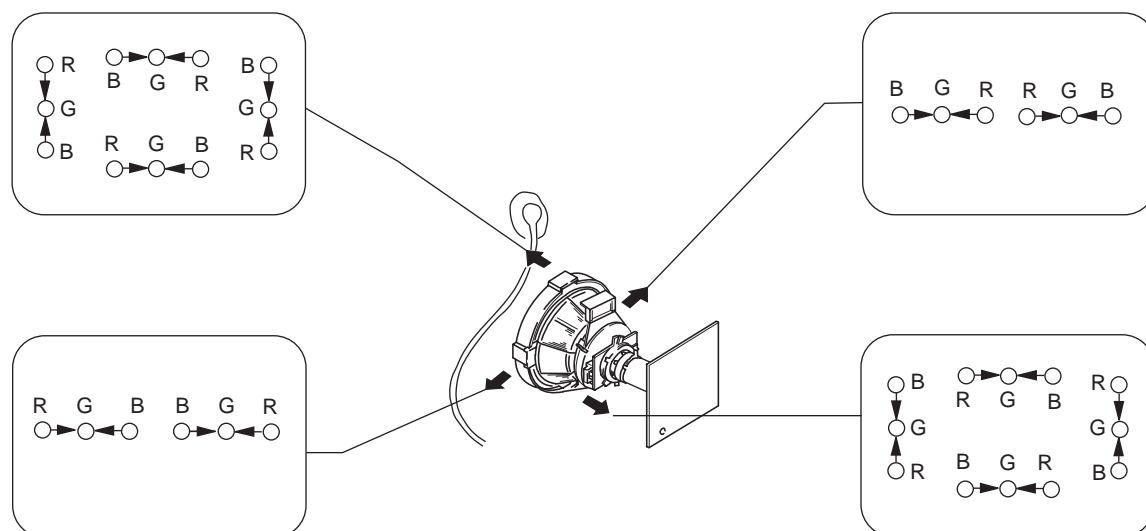
- The respective dot position resulting from moving each magnet interact, so be sure to perform adjustment whilst tracking.
Use the H.STAT VR to adjust the Red, Green and Blue dots so that they coincide at the centre of the screen [by moving the dots in the horizontal direction].



(3) Dynamic convergence adjustment.

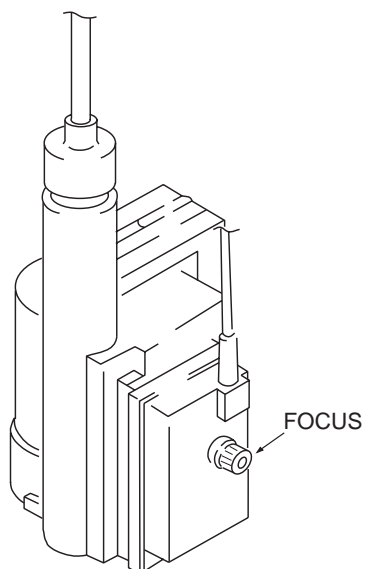
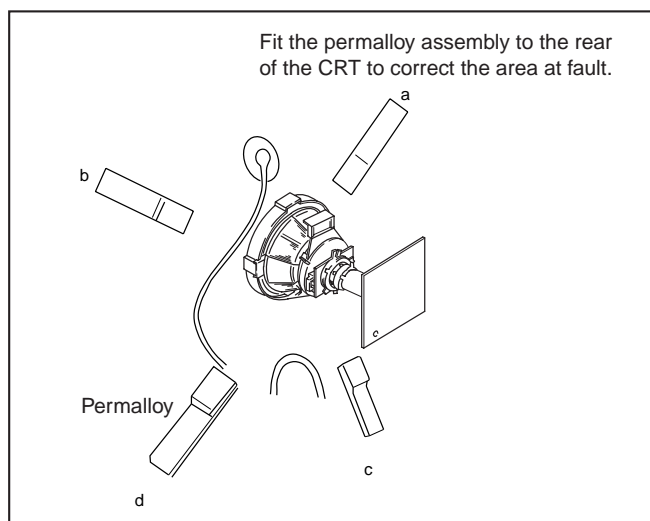
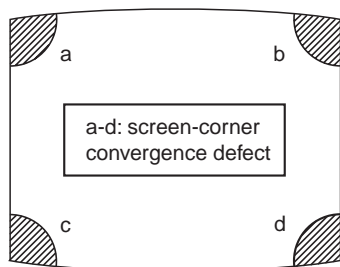
Preparation:

- Before starting this adjustment, adjust the horizontal and vertical static convergence.
- Slightly loosen the deflection yolk screws.
- Remove the deflection yolk spacer.
- Move the deflection yolk as indicated in the figure below and optimize the convergence.
- Tighten the deflection yolk screws.
- Re-install the deflection yolk spacer.



(4) Screen corner convergence.

- If you are unable to adjust the corner convergence properly, this can be corrected by the use of permalloy assemblies.

**3-3. Screen [G2], White balance****G2 Setting**

- Input a dot signal from the pattern generator.
- Set the Picture, Brightness and Colour to minimum.
- Apply 170Vdc from an external power supply to the R, G and B cathodes of the CRT.
- Whilst watching the picture, adjust the G2 control [RV701 SCREEN] located on the C Board to the point just before the flyback return lines disappear.

White balance adjustment

- Input a 'PAL' all-white signal from the pattern generator.
- Enter into the Service Mode.
- Enter into the 'Picture' service menu.
- Select the 'Green drive' and adjust so that the White Balance becomes optimum.
- Select the 'Blue drive' and adjust so that the White Balance becomes optimum.
- Set the Picture to MIN.
- Set the 'R-cut-off' to 07.
- Adjust the 'G-cut-off', and the 'B-cut-off' so that the White Balance becomes optimum.
- Press the ☐ button to return to TV operation.

PICTURE

R - Drive	Adj
G - Drive	Adj
B - Drive	Adj
R - cut - off	Adj
G - cut - off	Adj
B - cut - off	Adj
ID - start	02
ID - stop	01
ID - level	01
Bellfo	Adj
Sub Colour	Adj
Sub Brightness	Adj

3-4. FOCUS

- Input a Phillips colour pattern
- Set the picture settings to normal.
- Adjust the focus control located on the Flyback transformer to bring the centre of the screen into focus.

Note :Bring only the centre area of the screen into focus, switch to an all-white pattern and confirm that the magenta ring is hardly noticed. To obtain optimum focus balance the focus setting between optimum screen centre focus and a reduced magenta ring level.

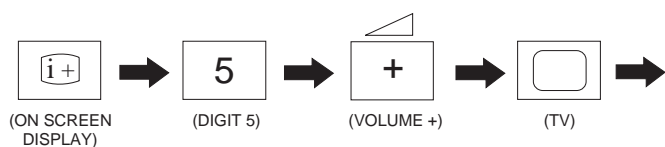
SECTION 4 CIRCUIT ADJUSTMENTS

4-1. ELECTRICAL ADJUSTMENTS

Service adjustments to this model can be performed using the supplied Remote Commander RM-883.

HOW TO ENTER INTO SERVICE MODE

1. Turn on the main power switch and enter into the stand-by mode.
2. Press the following sequence of buttons on the Remote Commander.



- 'TT--' will appear in the upper right corner of the screen.
Other status information will also be displayed.
3. Press 'MENU' on the remote commander to obtain the following menu on the screen.

TEST MENU
> Picture Geometry Sound TV Status AGC Adjust Technical

4. Move to the corresponding adjustment item using the 'Green' [up] or 'Blue' [down] buttons on the Remote Commander.
5. Press the 'Yellow' button to enter into the required menu item.
6. Press the 'Menu' button on the Remote Commander to quit the Service Mode when all adjustments have been completed.

Note : The data shown in the 'TV STATUS' table is dependant on destination and country.

PICTURE

R - Drive	Adj
G - Drive	Adj
B - Drive	Adj
R - cut - off	Adj
G - cut - off	Adj
B - cut - off	Adj
ID - start	02
ID - stop	01
ID - level	01
Bellfo	Adj
Sub Colour	Adj
Sub Brightness	Adj

GEOMETRY

V centre	Adj
V size	Adj
V Lin	Adj
S Corr	Adj
H Cent	Adj
H Size	Adj
Pin Amp	Adj
Corner Pin	Adj
Pin Phase	Adj
V Bow	Adj
V Angle	Adj
Upper V Lin	Adj
Lower V Lin	Adj
Left HBLK	07
Right HBLK	07
CD Mode (AV)	01

SOUND

Nicam Error Lower	20
Nicam Error Upper	80
Nicam Error Rate	xx [Status only]
AGC Gain Level	xx [Status only]

TV STATUS

Destination	A/L/E/U/D/B/K/R
Text Language	East/West

TECHNICAL

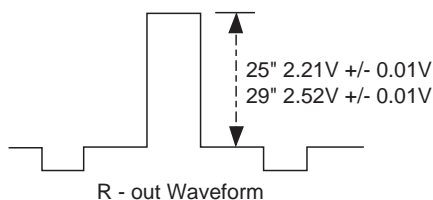
GD - Secam	30
BD - Secam	31
RC - Secam	11
GC - Secam	19
BC - Secam	10
GD - Sports	30
BD - Sports	36
RC - Sports	14
GC - Sports	15
BC - Sports	17
Y - Delay (AV)	07

SUB BRIGHTNESS ADJUSTMENT

1. Input a Phillips colour pattern.
2. Press 'TEST' 'TEST' 13 on the Remote Commander.
3. Adjust the 'Sub-Brightness' data so that there is barely a difference between the 0 IRE and 10 IRE signal levels.

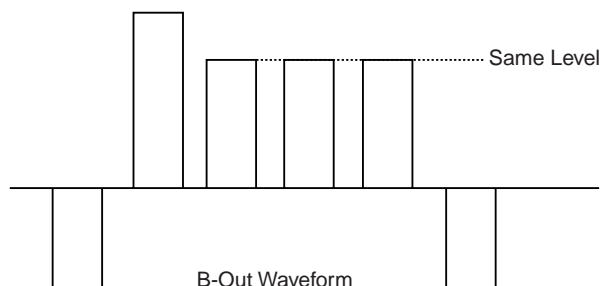
SUB CONTRAST ADJUSTMENT

1. Input a video signal that contains a small 100% white area on a black background
2. Set the picture control to maximum. ['TT01']
3. Connect an oscilloscope to Pin 1 of CN504 [A Board].
4. Enter into the 'Picture' service menu.
5. Adjust the 'R - Drive' data to obtain the following waveform.



SUB COLOUR ADJUSTMENT

1. Receive a PAL colour bar signal.
2. Connect an oscilloscope to Pin 3 of CN504 [A Board].
3. Enter into the 'Picture' service menu.
4. Adjust the 'Sub Colour' data so that the Cyan, Magenta and Blue colour bars are of equal levels as indicated below.



Note: Ensure that no signal is applied to the Antenna socket while carrying out the following IF adjustments.

SYSTEM B/G, D/K, I & L I.F ADJUSTMENT

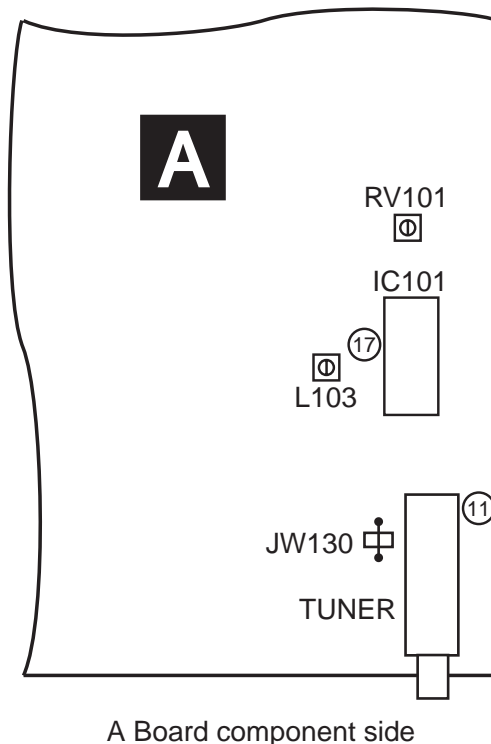
1. Input a 38.9Mhz carrier signal at 100dBuV to Pin 11 [IF output] of the tuner [TU101].
2. Measure the voltage at Pin 17 of [IC101].
3. Adjust L103 [A Board] to obtain a voltage of 2.5V +/- 0.3V.

SYSTEM L BAND 1 I.F ADJUSTMENT

1. Input a 34.0MHz carrier signal at 100dBuV to Pin 11 [IF output] of the tuner [TU101].
2. Select 'system L' + C00 [channel 00].
3. Measure the voltage at Pin 17 [IC101].
4. Adjust RV101 [A Board] to obtain a voltage of 2.5V +/- 0.3V.

TUNER AGC ADJUSTMENT

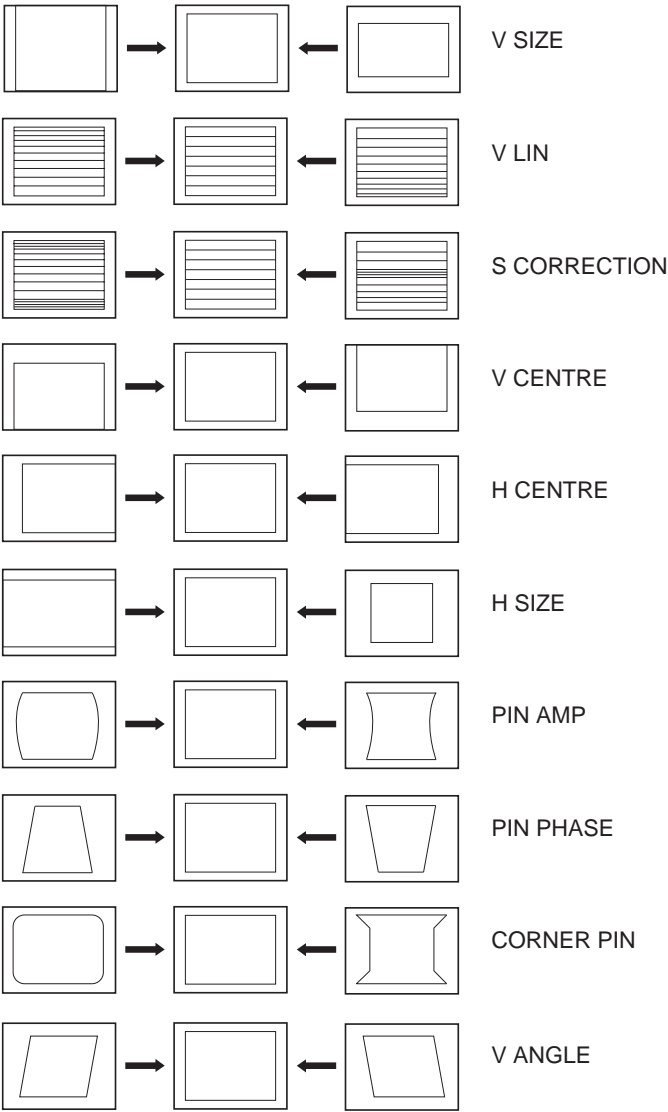
1. Receive a signal of 65dBuV / 75 ohm terminated, via the tuner antenna socket.
2. Connect a voltmeter to JW130 [A Board].
3. Enter into the 'Test Menu'.
3. Select the 'AGC Adjust' menu item.
4. Adjust the data using the Yellow and Green buttons on the Remote Commander to obtain a voltage of 3.0V +/- 0.2V.



DEFLECTION SYSTEM ADJUSTMENT

- 1. Enter into the ‘Geometry’ service menu.
- 2. Select and adjust each item in order to obtain the optimum image.

GEOMETRY		
V centre	Adj	
V size	Adj	
V Lin	Adj	
S Corr	Adj	
H Cent	Adj	
H Size	Adj	
Pin Amp	Adj	
Corner Pin	Adj	
Pin Phase	Adj	
V Bow	Adj	
V Angle	Adj	
Upper V Lin	Adj	
Lower V Lin	Adj	
Left HBLK	07	
Right HBLK	07	
CD Mode (AV)	01	



4-2. TEST MODE 2:

Is available by pressing 'TEST' button twice, OSD 'TT' appears. The functions described below are available by pressing the two numbers. To release the Test mode 2, press 0 twice, or switch the TV into stand-by mode, or press the ☐ TV button on the remote commander.

00	Cancel Test mode
01	Picture maximum
02	Picture minimum
03	Volume 35%
04	Volume 50%
05	Volume 65%
06	Volume 80%
07	Ageing mode On/Off
08	Set shipping conditions
09	Display TV Status
10	No function
11	Sub Picture Adjustment
12	Sub Colour Adjustment
13	Sub Brightness Adjustment
14	Text H position Adjustment
15	Rotation test
16	Picture level 50%
17	Audio mute ON
18	Disable Blanking
19	No function
20	No function
21	Destination A
22	Destination L
23	Destination E
24	Destination U
25	Destination D
26	Destination B
27	Destination K
28	Destination R
29	No function
30	No function
31	Audio shutoff Disable/Enable
32	RGB priority Disable/Enable
33	Rotation On/OFF
34	Text language East/West
35	Wide CRT/4:3 CRT
36	VM ON/OFF test
37	No function
38	No function
39	No function
40	No function
41	Re-initialize the NVM [Only when Prog=59]

42	Re-initialise geometry settings [Only when Prog=59]
43	No function
44	No function
45	No function
46	No function
47	No function
48	Set NVM as NON Virgin [Only when Prog=59]
49	Set NVM as Virgin [Only when Prog=59]
50	No function
51	No function
52	No function
53	No function
54	No function
55	No function
56	No function
57	No function
58	No function
59	No function
60	No function
61	Auto AGC Adjust
62	Alternative Dest B Autotuning
63	Enable/Disable Y/C input
64	Signal Quality Check for Auto Tune
65	Signal Quality NOT Checked for Auto Tune
66	No function
67	Manual AGC Adjust
68 -100	No function

4-3. FE-1 SELF DIAGNOSTIC SOFTWARE

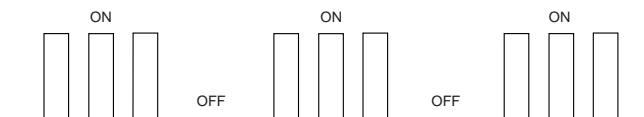
The identification of errors within the FE-1 chassis is triggered in one of two ways :- 1: Busy or 2: Device failure to respond to IIC. In the event of one of these situations arising the software will first try to release the bus if busy (Failure to do so will report with continuous flashing LED) and then communicate with each device in turn to establish if a device is faulty. If a device is found to be faulty the relevant device number will be displayed through the LED (Series of flashes which must be counted) See Table 1., non fatal errors are reported using this method. Each time the software detects an error it is stored within the NVM. See Table 2.

Table 1

ERROR	LED ERROR COUNT
No error	00
Not allowed (may be confused with Sircs response flash!)	01
Protection circuit trip < ANY TIME >	02
Reserved	03
No vertical sync	04
AKB	05
IIC bus clock and/or data lines low at Power ON	06
NVM no IIC bus acknowledge at Power ON	07
Jungle controller no IIC acknowledge at Power ON	08
Tuner no acknowledge at Power ON	09
Sound processor no acknowledge at Power ON	10

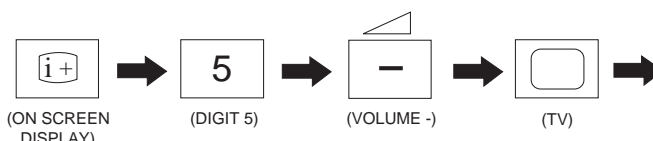
Flash Timing Example : e.g. error number 3

SiBy LED



How to enter into Table 2

1. Turn on the main power switch of the TV set and enter into the 'Standby Mode'.
2. Press the following sequence of buttons on the Remote Commander.



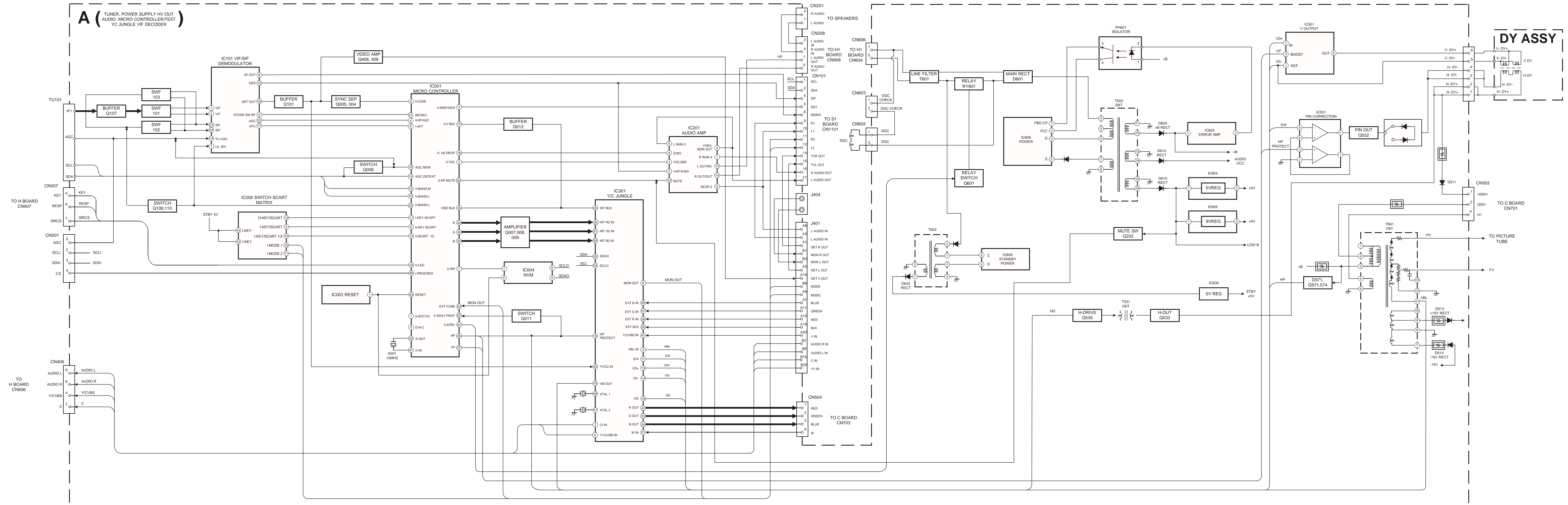
3. The following table will be displayed indicating the error count.

Table 2

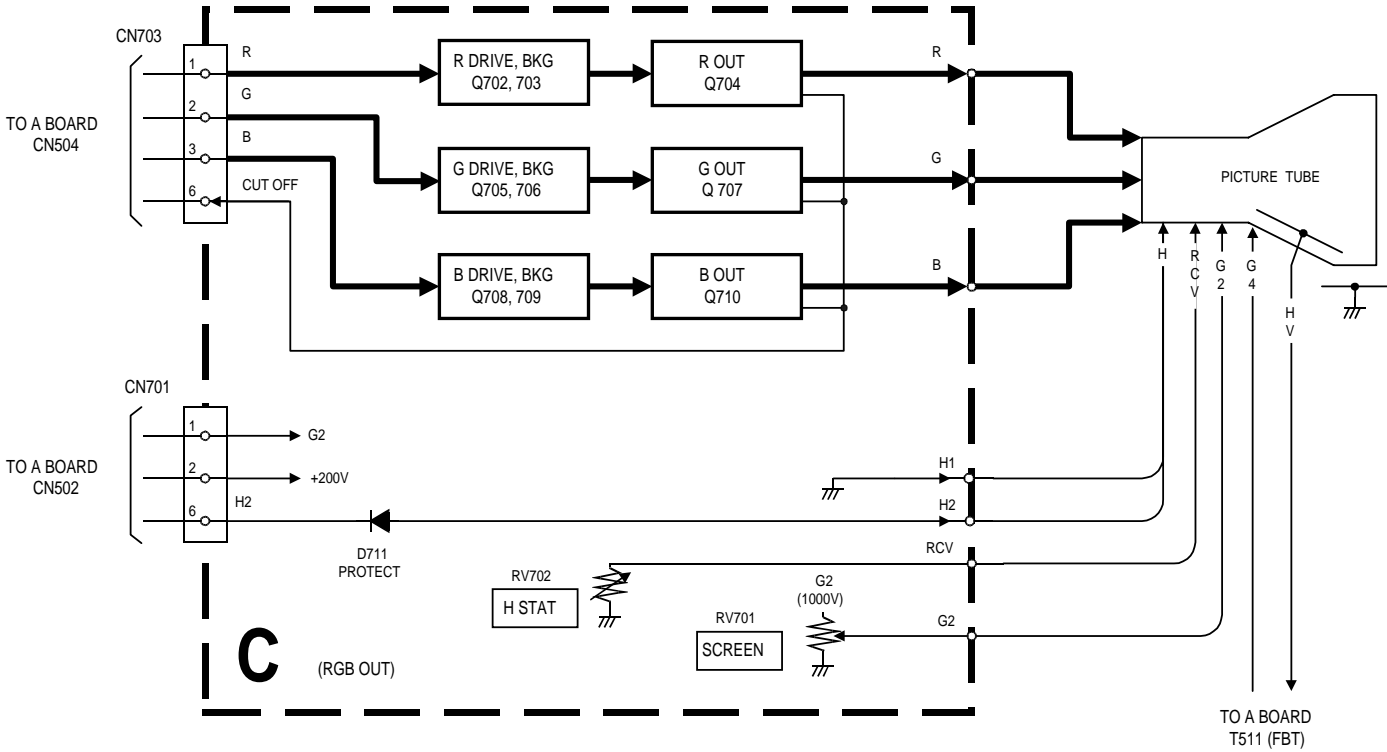
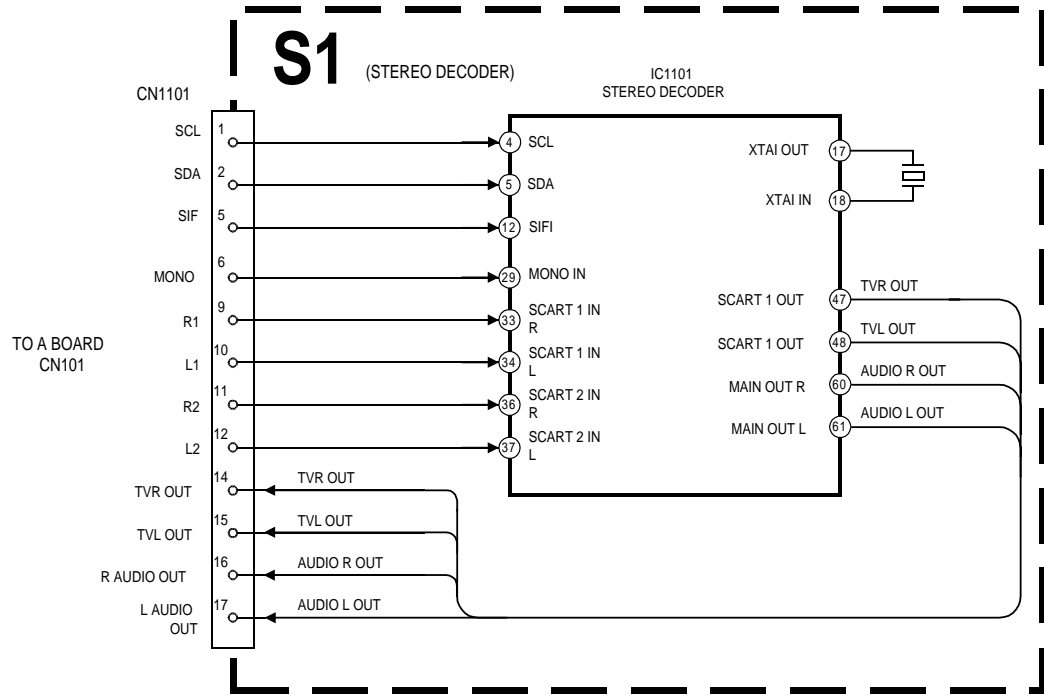
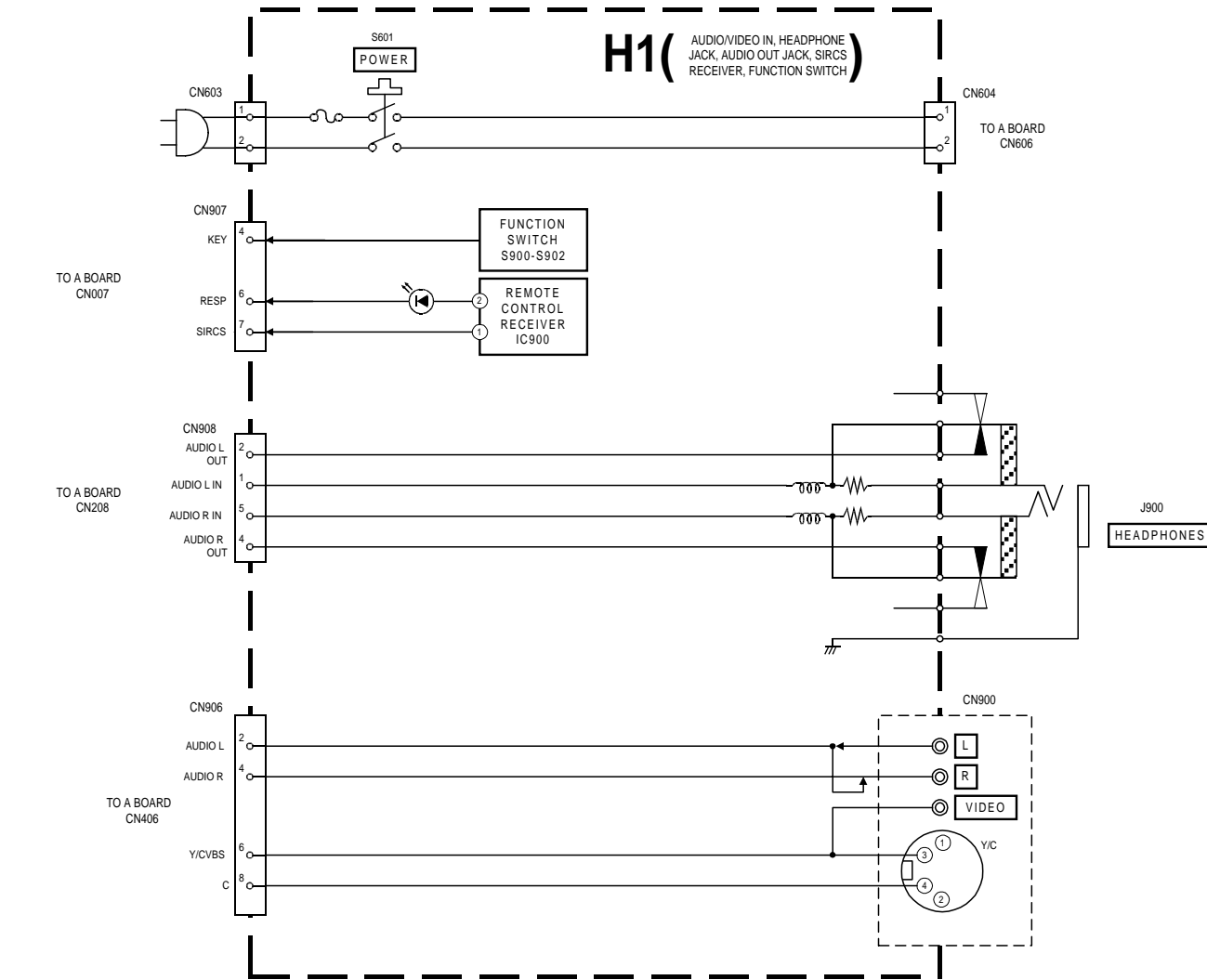
Error	Times
2	-
3	-
4	-
5	-
6	-
7	-
8	-
9	-
10	-

Note: To clear the error count data press '80' on the Remote commander.

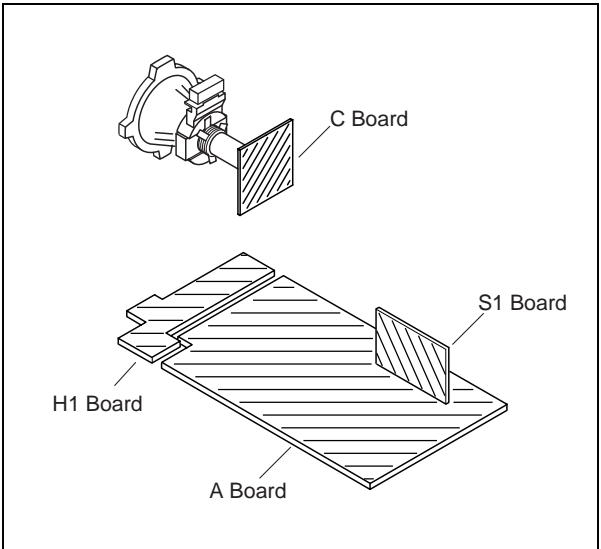
5-1 BLOCK DIAGRAMS (1)



5-1 BLOCK DIAGRAMS (2)



5-2. CIRCUIT BOARD LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

- Note :**
- All capacitors are in μF unless otherwise noted.
 - pF : μF 50WV or less are not indicated except for electrolytic types.
 - Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch : 5mm
Electrical power rating : 1/4W

- Chip resistors are 1/10W
- All resistors are in ohms.
- k = 1000 ohms, M = 1000,000 ohms

- : nonflammable resistor.
- : fusible resistor.
- : internal component.
- : panel designation or adjustment for repair.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- All voltages are in Volts.
- Readings are taken with a 10Mohm digital multimeter.
- Readings are taken with a color bar input signal.
- Voltage variations may be noted due to normal production tolerances.

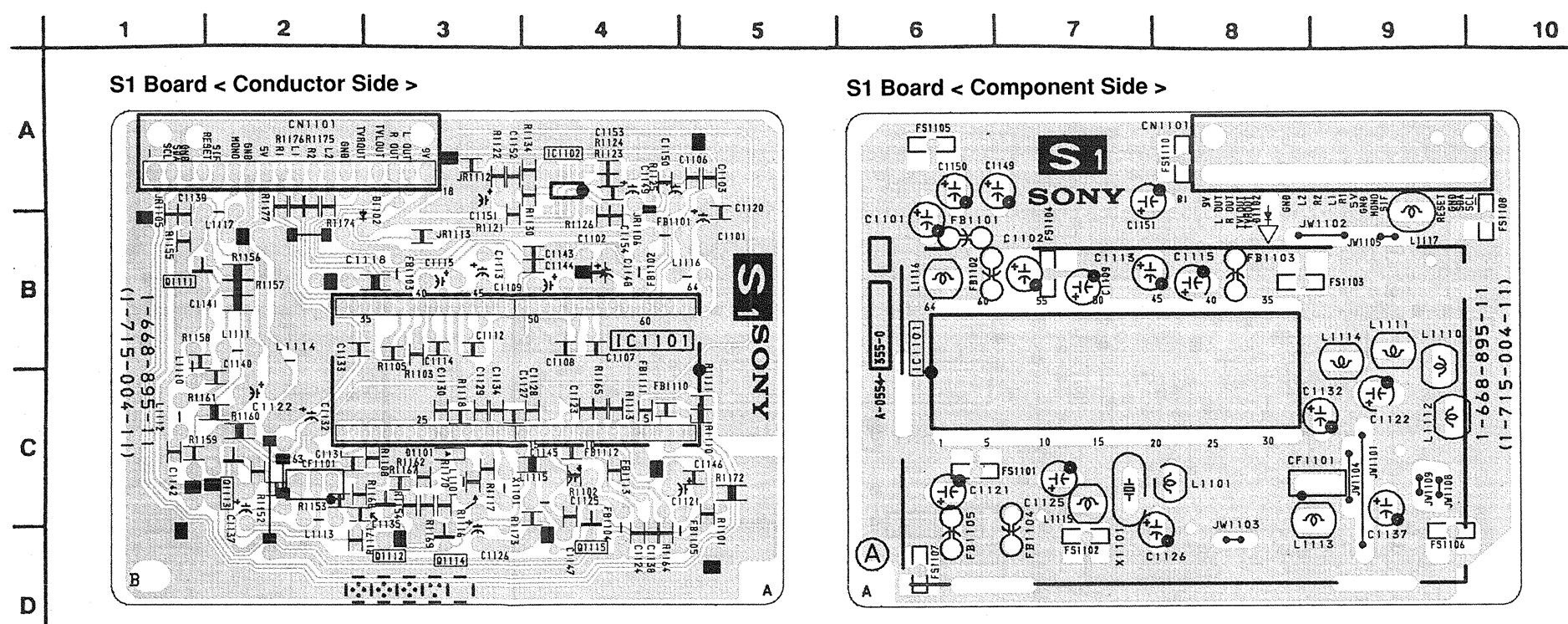
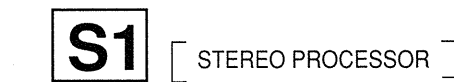
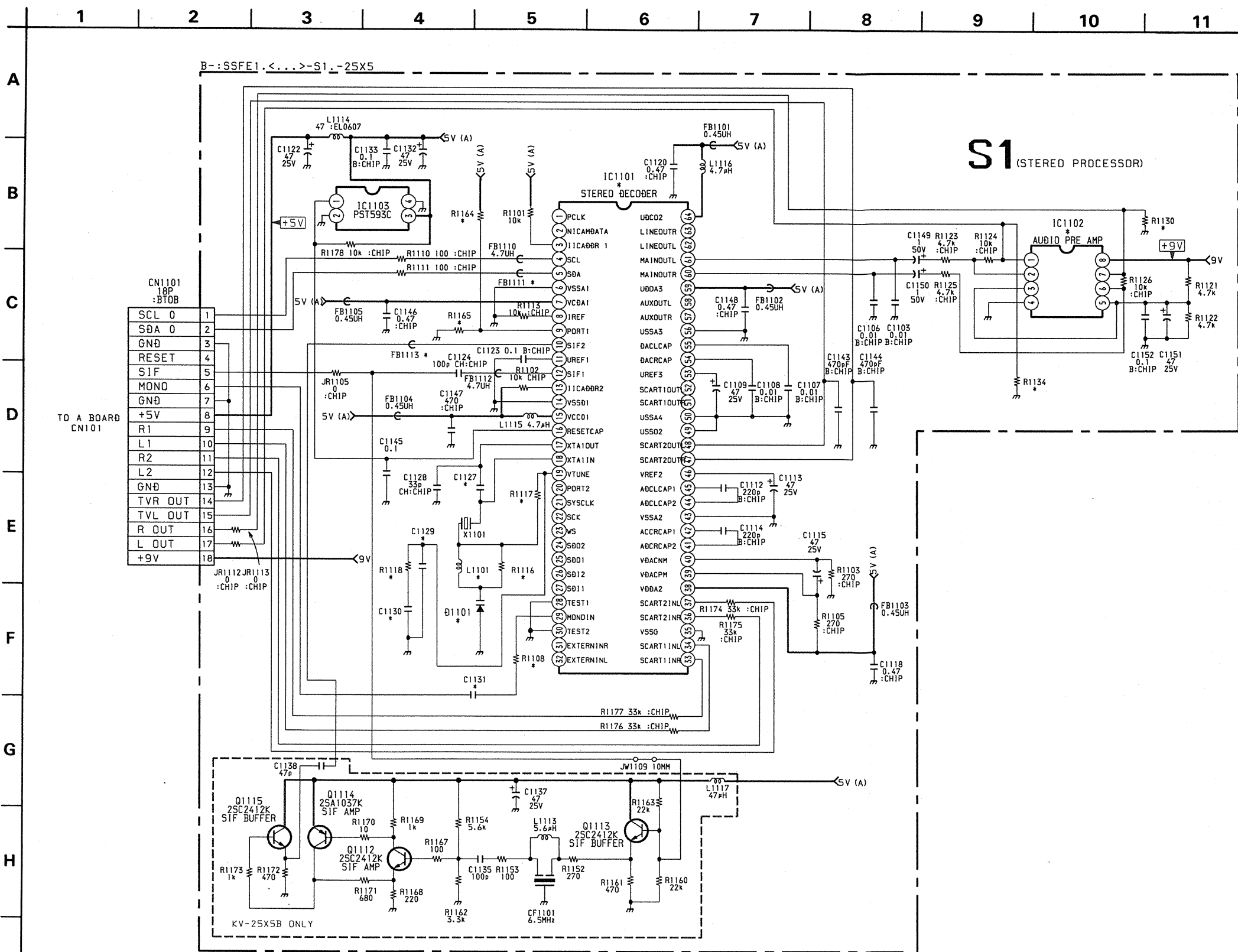
- : B + bus.
- : B - bus.
- : RF signal path.
- : earth - ground.
- : earth - chassis.

Reference Information

RESISTOR	RN	: METAL FILM
	RC	: SOLID
	FPRD	: NON FLAMMABLE CARBON
	FUSE	: NON FLAMMABLE FUSIBLE
	RS	: NON FLAMMABLE METAL OXIDE
	RB	: NON FLAMMABLE CEMENT
	RW	: NON FLAMMABLE WIREWOUND
		: ADJUSTMENT RESISTOR
COIL	LF-8L	: MICRO INDUCTOR
CAPACITOR	TA	: TANTALUM
	PS	: STYROL
	PP	: POLYPROPYLENE
	PT	: MYLAR
	MPS	: METALIZED POLYESTER
	MPP	: METALIZED POLYPROPYLENE
	ALB	: BIPOLAR
	ALT	: HIGH TEMPERATURE
	ALR	: HIGH RIPPLE

Note: The components identified by shading and marked are critical for safety. Replace only with the part numbers specified in the parts list.

Note: Les composants identifiés par une trame et par une marque sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifique.



S1 BOARD IC VOLTAGE TABLE

IC Voltage Table		
Ref No	Pin No	Voltage (V)
IC1101	4	3.4
	5	3.2
	7	4.8
	8	2.3
	9	4.8
	10 - 12	2.3
	13	4.8
	15	4.8
	16	4.8
	17	2.6
	18	3.5
	19	4.0
	33 - 34	2.4
	36 - 37	2.4
	38 - 39	4.8
	41 - 42	2.4
	44 - 48	2.4
	53 - 55	2.4
	59	4.8
	60 - 61	2.4
IC1102	64	4.8
	1	4.5
	2	4.1
	3	4.5
	6	4.3
	7	3.5
	8	9.0

S1 BOARD TRANSISTOR VOLTAGE TABLE

Ref No	(B) Base	(C) Collector	(E) Emitter
Q1111	2.0	4.1	1.3
Q1112	1.5	3.5	0.9
Q1113	1.9	4.1	1.3
Q1114	3.5	3.3	4.1
Q1115	3.3	4.1	2.7

S1 BOARD * MARK

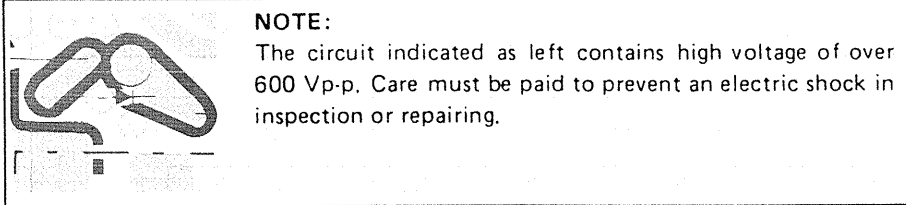
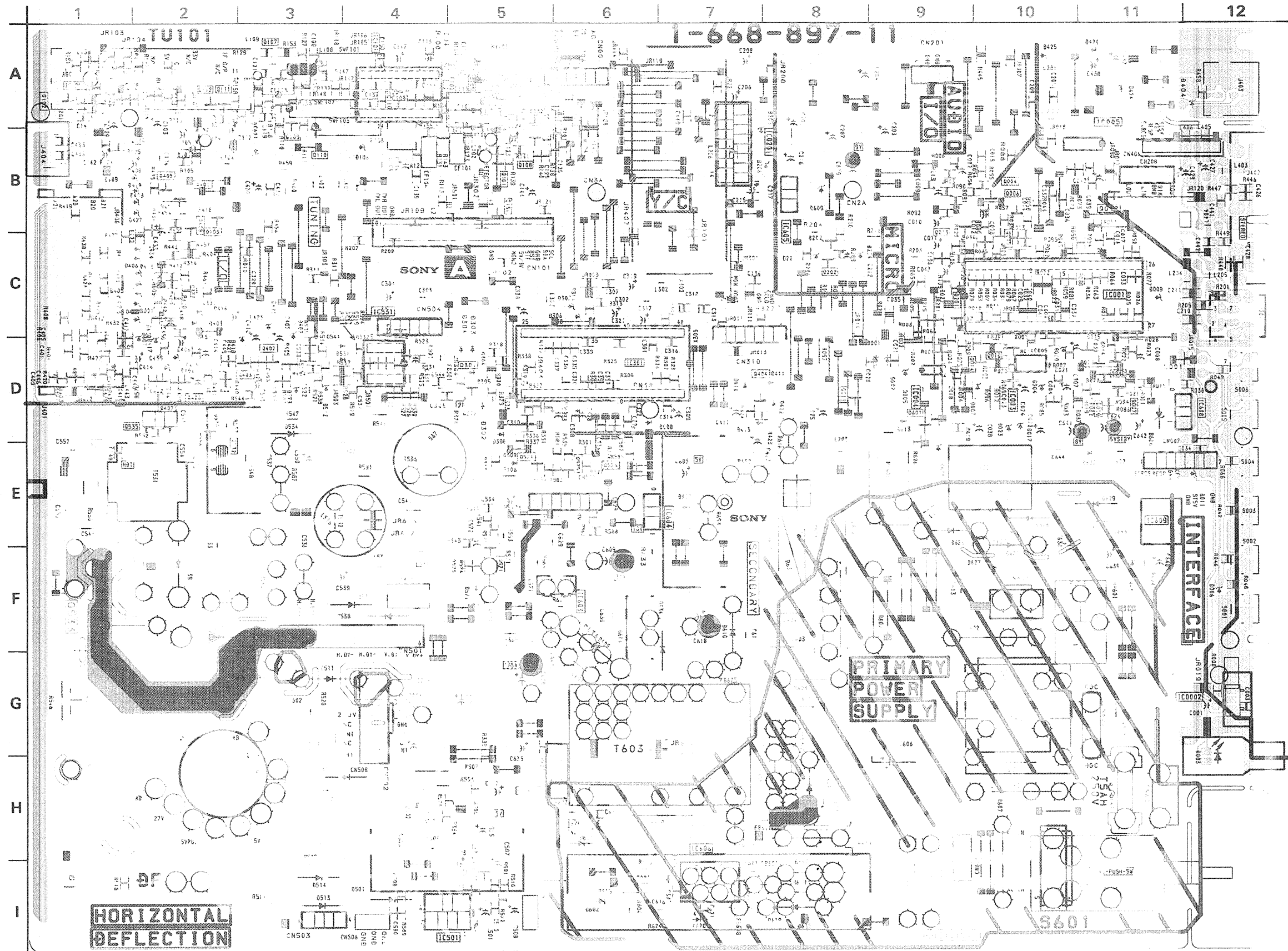
Ref	25X5A	25X5B	25X5D	25X5E	25X5K	25X5L	25X5R	25X5U
C1127	22PF	33PF	22PF	33PF	33PF	33PF	22PF	33PF
C1129	-	0.03MF	-	0.03MF	0.03MF	0.03MF	-	0.03MF
C1130	-	0.3MF	-	0.3MF	0.3MF	0.3MF	-	0.3MF
C1131	0.47MF	0.47MF	0.47MF	-	-	-	0.47MF	-
D1101	0	BB135	0	BB135	BB135	BB135	0	BB135
FB1111	6.8UH	4.7UH	6.8UH	4.7UH	4.7UH	4.7UH	6.8UH	4.7UH
FB1113	-	4.7UH	-	-	-	-	-	-
IC1101	TDA9870	TDA9875P	TDA9870	TDA9875P	TDA9875P	TDA9875P	TDA9870	TDA9875P
IC1102	LM358D	UPC4558G2	LM358D	UPC4558G2	UPC4558G2	UPC4558G2	LM358D	UPC4558G2
L1101	-	2.7UH	-	2.7UH	2.7UH	2.7UH	-	2.7UH
L1113	-	5.6UH	-	-	-	-	-	-
L1117	-	47UH	-	-	-	-	-	-
R1108	2.2K	2.2K	2.2K	-	-	-	2.2K	-
R1116	0	39K	0	39K	39K	39K	0	39K
R1117	-	10K	-	10K	10K	10K	-	10K
R1118	-	20K	-	20K	20K	20K	-	20K
R1130	10K	-	10K	-	-	-	10K	-
R1134	10K	-	10K	-	-	-	10K	-
R1164	-	10K	-	10K	10K	10K	-	10K
R1165	0	-	0	-	-	-	0	-

A BOARD

IC		DIODE		D539	F - 2
IC001	C - 11	D001	D - 8	D571	F - 5
IC003	D - 10	D002	D - 8	D601	G - 8
IC004	D - 9	D004	D - 10	D602	I - 6
IC005	B - 11	D007	D - 9	D603	H - 6
IC101	A - 4	D008	D - 7	D605	G - 6
IC201	B - 7	D009	C - 11	D608	H - 8
IC301	D - 6	D010	D - 10	D610	F - 7
IC501	I - 4	D011	E - 12	D613	E - 9
IC531	C - 4	D012	D - 11	D614	G - 6
IC603	F - 6	D014	D - 11	D619	I - 8
IC604	E - 6	D015	D - 11	D621	F - 10
IC605	C - 8	D017	E - 10	D626	F - 9
IC606	I - 7	D018	D - 7	D627	F - 9
IC608	D - 12	D023	E - 10	D628	E - 10
IC609	E - 11	D101	B - 2	D629	E - 11
TRANSISTOR		D104	A - 3	D631	F - 11
Q004	B - 9	D201	C - 8	D632	E - 10
Q005	C - 10	D202	C - 8	D633	E - 9
Q006	B - 9	D204	C - 9		
Q007	D - 10	D205	B - 8		
Q008	D - 11	D206	B - 7		
Q009	D - 11	D306	C - 6		
Q010	D - 10	D307	C - 6		
Q011	D - 8	D308	E - 5		
Q012	B - 11	D309	E - 5		
Q013	B - 9	D405	C - 1		
Q101	B - 5	D406	C - 2		
Q107	A - 3	D407	D - 2		
Q109	B - 2	D409	B - 1		
Q110	B - 2	D415	D - 2		
Q111	A - 2	D417	D - 2		
Q112	A - 2	D422	C - 1		
Q202	C - 8	D423	C - 1		
Q401	B - 2	D427	B - 2		
Q405	B - 2	D501	I - 4		
Q408	B - 2	D502	H - 4		
Q501	I - 5	D511	G - 3		
Q532	E - 2	D512	H - 3		
Q533	F - 1	D513	I - 3		
Q535	D - 1	D514	I - 3		
Q571	F - 5	D534	D - 3		
Q574	E - 5	D535	F - 4		
Q575	E - 6	D536	F - 2		
Q576	E - 6	D538	F - 4		

A POWER SUPPLY,
DEFLECTION, TUNING, PROCESSOR
VIDEO SIGNAL PROCESSOR, AV IN OUT

A Board



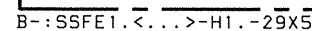
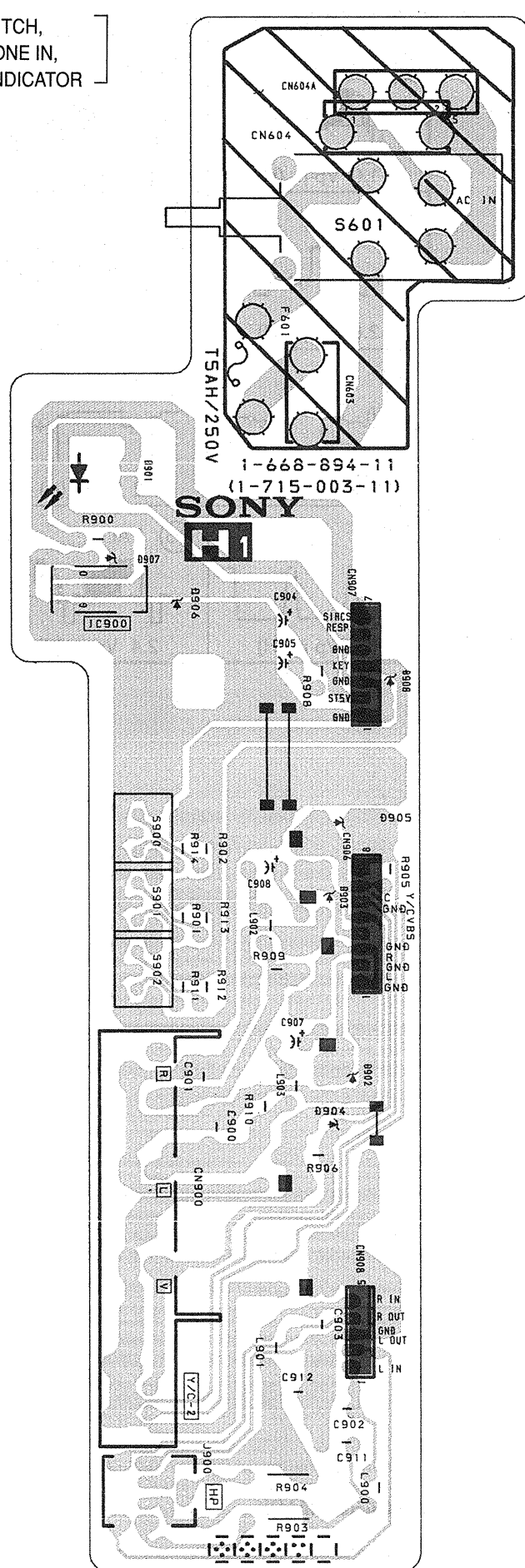
NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

A BOARD TRANSISTOR VOLTAGE TABLE

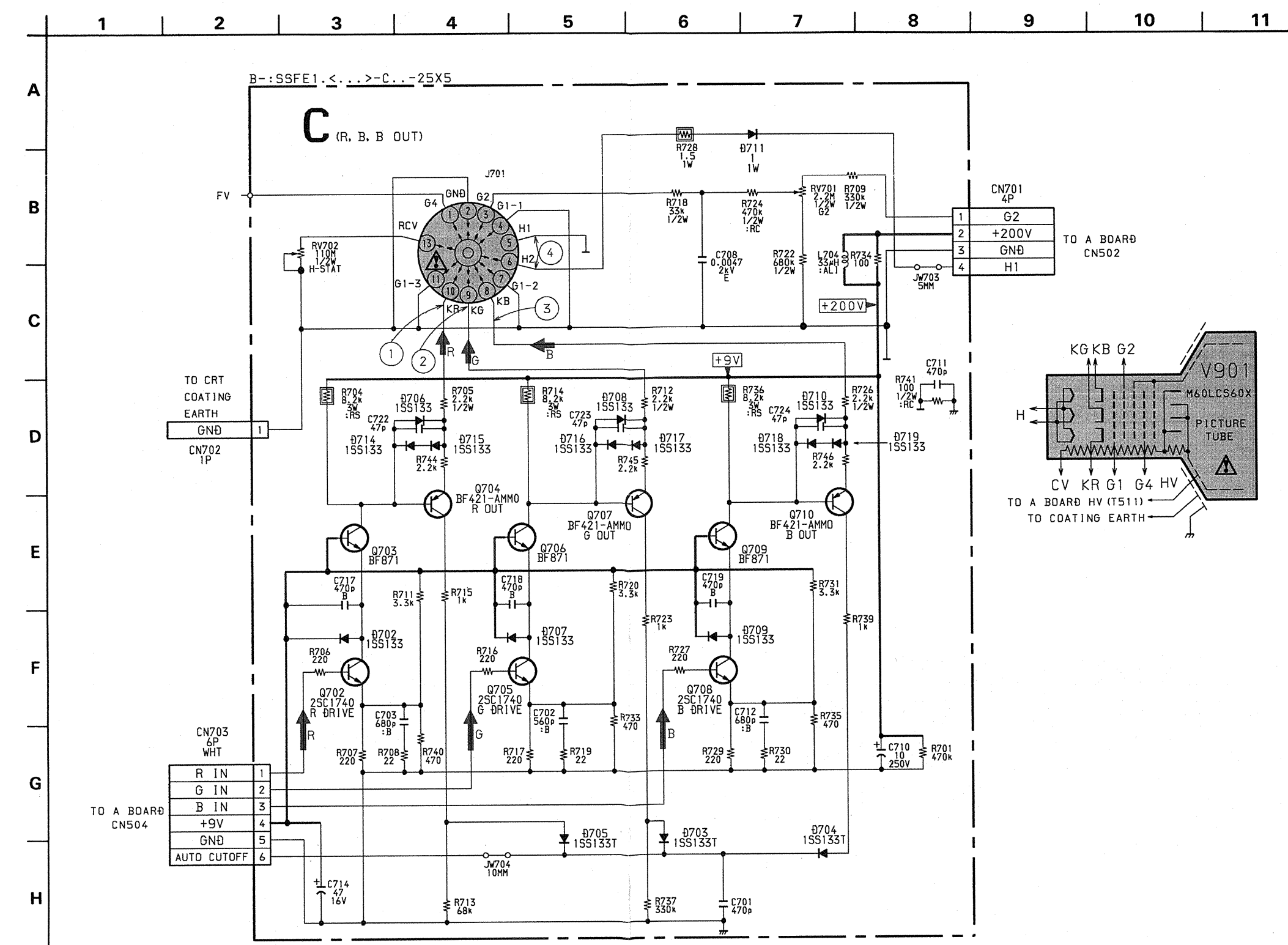
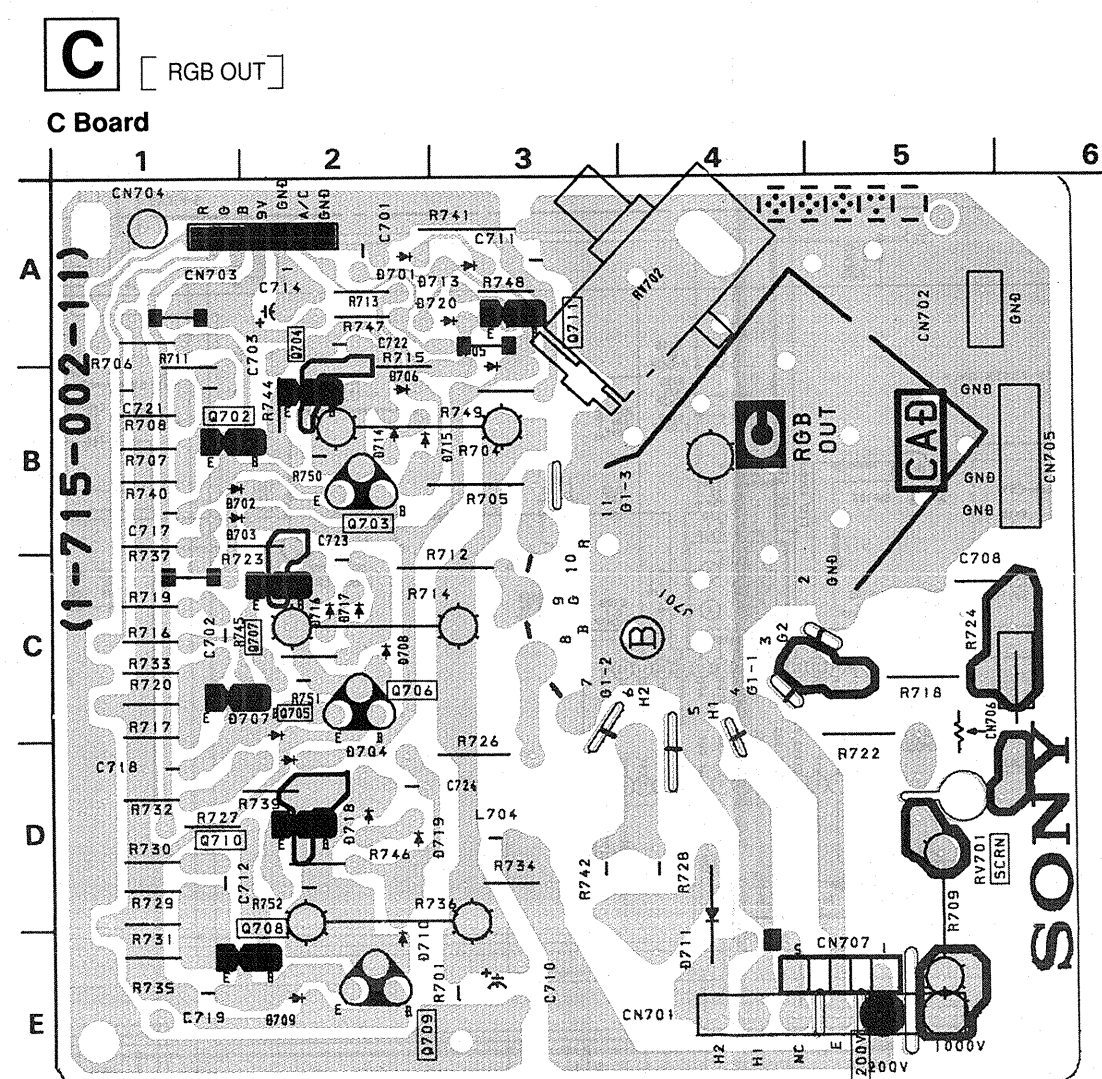
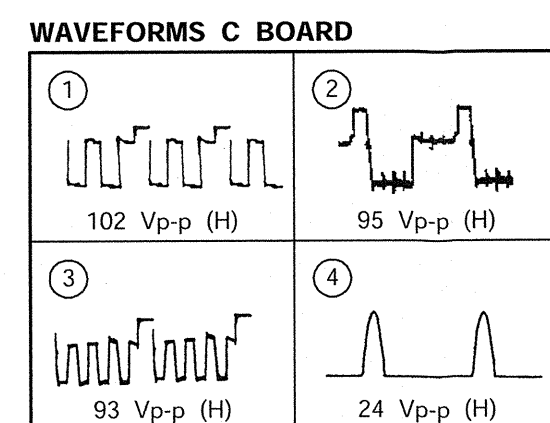
Transistor Voltage Table			
Ref No	(B) Base	(C) Collector	(E) Emitter
Q004	4.7	0.7	4.9
Q005	0.3	4.8	-
Q006	-	2.0	-
Q007	-	4.9	-
Q008	-	4.9	-
Q009	-	4.9	-
Q010	0.6	-	-
Q011	0.5	-	-
Q012	-	4.8	-
Q101	2.0	-	2.6
Q109	-	4.7	-
Q110	4.3	-	-
Q111	2.3	2.9	2.9
Q112	2.9	-	-
Q202	0.6	-	-
Q401	8.0	3.4	8.6
Q405	4.4	8.8	3.7
Q408	2.6	8.0	2.0
Q532	7.3	3.1	-
Q533	-0.2	-152.0	-
Q535	-0.7	92.0	-
Q571	134.2	-	134.4
Q574	-	2.0	-
Q576	3.4	6.7	2.8
Q601	4.0	3.6	4.8

A BOARD IC VOLTAGE TABLE






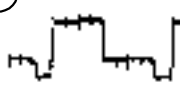




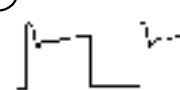
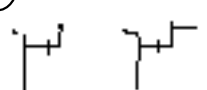






IC Voltage Table								
Ref No	Pin No	Voltage (V)	Ref No	Pin No	Voltage (V)	Ref No	Pin No	Voltage (V)
IC001	4	0.8	IC101	1 - 2	3.2	IC301	34 - 35	3.3
	6	3.2		3	4.8		41	5.0
	7 - 8	4.8		4	3.0		42	8.6
	9	0.3		5	2.8		43	5.0
	10	2.0		6	2.7		44	8.8
	11	1.5		7	3.9	45	5.2	
	12	4.7		8	2.2	48	1.5	
	19	3.6		12	2.0	1	15.3	
	20	4.3		15	1.5	5	15.3	
	21	4.8		17	0.3	7	15.3	
	24	2.5		18 - 19	2.6	10	4.5	
	25	2.1		21	4.7	12	15.3	
	26	2.4		22	0.9	13	31.2	
	30	4.8		23 - 24	3.2	14	15.3	
	31	5.0	1	3.3	1	1.4		
	36	0.2	2	5.0	2	14.0		
	37	0.1	3	4.3	3	-13.0		
	38 - 39	5.0	4	5.0	4	-14.0		
	41 - 42	2.2	6	4.4	5	0.2		
	44	4.8	8	4.5	6	14.5		
	45	2.8	11	3.9	7	1.4		
	47	0.1	12	2.4	1	1.6		
	48	2.4	13	3.5	2	1.7		
	49	3.3	14	3.4	3	1.9		
50	3.1	15	5.6	5	2.8			
51	0.1	16	7.6	6	2.0			
IC004	5 - 6	4.8	18	1.3	7	7.3		
	7	3.3	19	2.4	8	8.8		
	8	3.2	20	3.8	1 - 2	-60.0		
	9	3.2	21	1.6	4	-51.3		
IC005	10	4.7	22 - 24	1.5	IC609	4	-58.0	
	12	4.7	26 - 28	4.5				
	13	1.5	30	4.5				
	14	4.7	31 - 32	4.4				
	16	4.7	33	8.1				



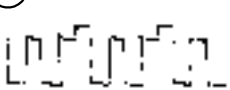



Ref No	(B) Base	(C) Collector	(E) Emitter
Q702	1.5	8.3	1.1
Q703	8.8	169.8	8.3
Q704	169.5	1.9	209.5
Q705	1.5	8.3	1.1
Q706	8.8	170.7	8.3
Q707	170.5	1.9	215.7
Q708	1.5	8.3	1.0
Q709	8.9	171.3	8.3
Q710	171.2	1.9	206.3



WAVEFORMS A BOARD

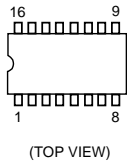
<p>① PAL</p>  <p>1.0 Vp-p (H)</p>	<p>① SECAM</p>  <p>1.3 Vp-p (H)</p>	<p>② PAL</p>  <p>1.0 Vp-p (H)</p>	<p>② SECAM</p>  <p>1.3 Vp-p (H)</p>	<p>③</p>  <p>2.6 Vp-p (H)</p>
<p>④</p>  <p>2.6 Vp-p (H)</p>	<p>⑤</p>  <p>0.5 Vp-p (H)</p>	<p>⑥</p>  <p>5.0 Vp-p (H)</p>	<p>⑦</p>  <p>1.4 Vp-p (H)</p>	<p>⑧</p>  <p>2.0 Vp-p (H)</p>
<p>⑨</p>  <p>146 Vp-p (V)</p>	<p>⑩</p>  <p>12 Vp-p (H)</p>	<p>⑪</p>  <p>142 Vp-p (H)</p>	<p>⑫</p>  <p>56 Vp-p (V)</p>	<p>⑬</p>  <p>290 Vp-p (H)</p>
<p>⑭</p>  <p>1.1KVp-p (H)</p>	<p>⑮ PAL</p>  <p>2.4 Vp-p (H)</p>	<p>⑮ SECAM</p>  <p>3.0 Vp-p (H)</p>		

WAVEFORMS C BOARD

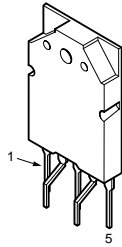
<p>①</p>  <p>102 Vp-p (H)</p>	<p>②</p>  <p>95 Vp-p (H)</p>
<p>③</p>  <p>93 Vp-p (H)</p>	<p>④</p>  <p>24 Vp-p (H)</p>

5-4 SEMICONDUCTORS (1)

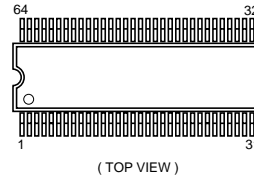
CD4052BCM



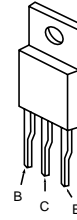
STR-F6654



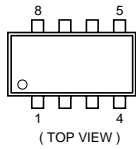
TDA9875
TDA9870



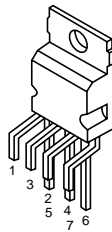
2SA1837



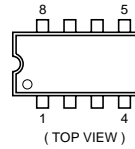
LM358DR-EZ
NJM4558M-TE2
NJM2903D



STV9379



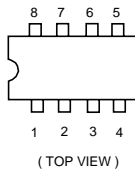
TOP209P



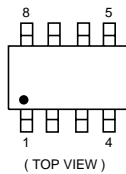
2SC4793



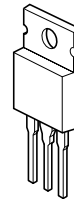
LM393P
TDA2822M
TEA2124



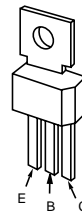
ST24W08FM6TR



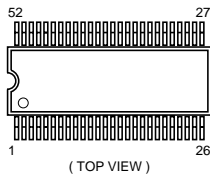
TYA7805CTV
TYA7809CTV



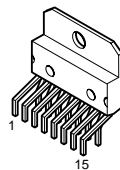
BF871-127



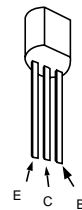
SAA5497PS/MIA/038
SAA5497PS/MIA/039
SAA5497PS/MIA040



TDA7495

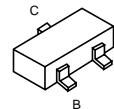
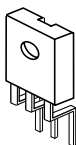


BF421-AMMO
2SA1091-O

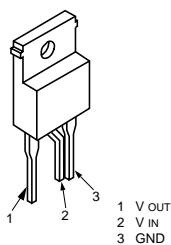


DTA144ESA
DTA144ESA-TP
DTC114EK
DTC114EKA-T146
DTC143TKA-T146
DTC144EKA-T-146R
2SA1037K-T-146-
R2SA1162-G
2SC2412K-QR
2SC2412K-T-146-R

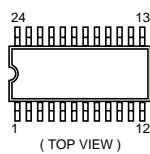
SBX1981-51



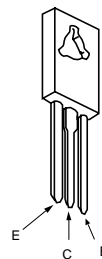
SE-135N
SE135N-LF12



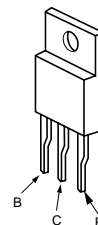
TDA9818-V1
TDA9817-V1



2SC688-LK

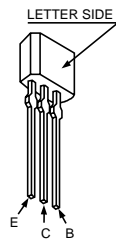


IRF614

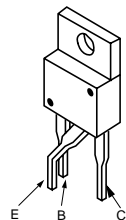


5-4 SEMICONDUCTORS (2)

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2SA933AS-RT
2SC1740S-RT

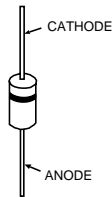


2SK2251-01-F19

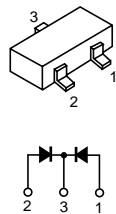


AK04-V1
AU-012-V1
BYD33G
BYD33G-AMMO
DINL20-TR
ERB44-06TP1
EG-1Z-V1
EL1Z
ERD28-06S

ERD28-08S
ERC06-15
FMN-G12S
RG1CLF-B1
RGP10GPKG23
RU3YX-LF-C4
RU3YX-V1
RU-4AM-T3
1SS292T-77

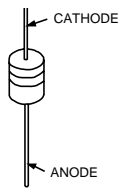


DAN202K
DAN202K-T146

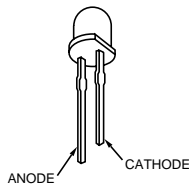


ERA81-004TP1
ERA83-006
MTZJ-T-77-3.9B
MTZJ-T-77-5.6B
MTZJ-T-77-5.6C
MTZJ-T-77-6.8A
MTZJ-T-77-6.8C
MTZJ-T-77-7.5C
MTZJ-T-77-9.1A
MTZJ-T-77-9.1A
MTZJ-T-77-10

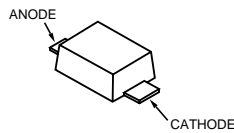
MTZJ-T-77-33A
MTZJ-33C
MTZJ-7.5B
RD3.9ES-B2
RD5.6ESB2
RD6.8ES-B2
RD7.5ESB2
RD9.1ES-B3
1SS119-25TD
1SS133T-77



SEL12108-D

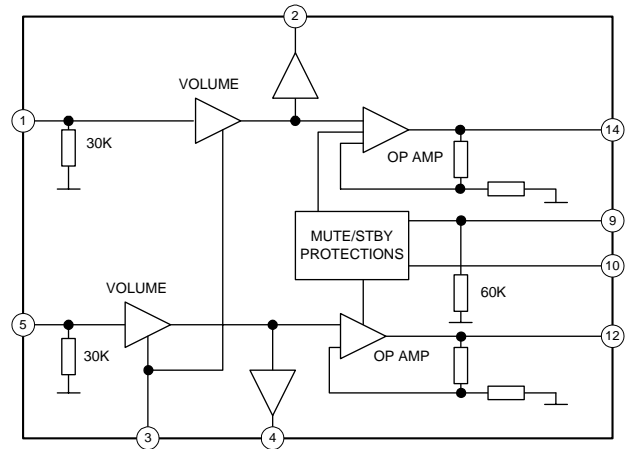


UF4005PK623

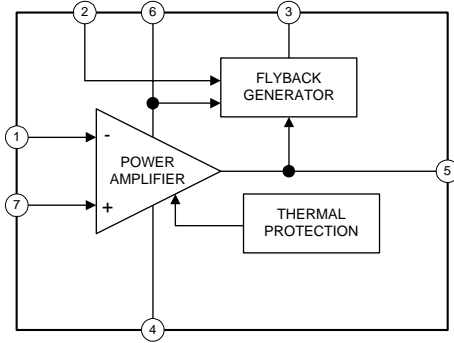


5-5. IC BLOCK DIAGRAMS

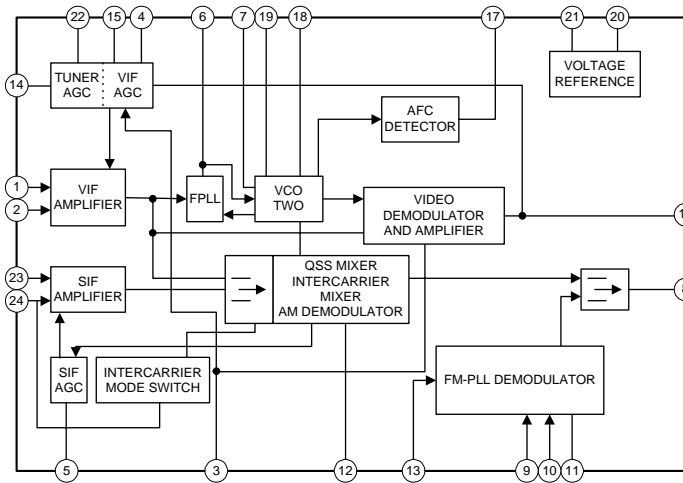
A BOARD IC201 TDA7495



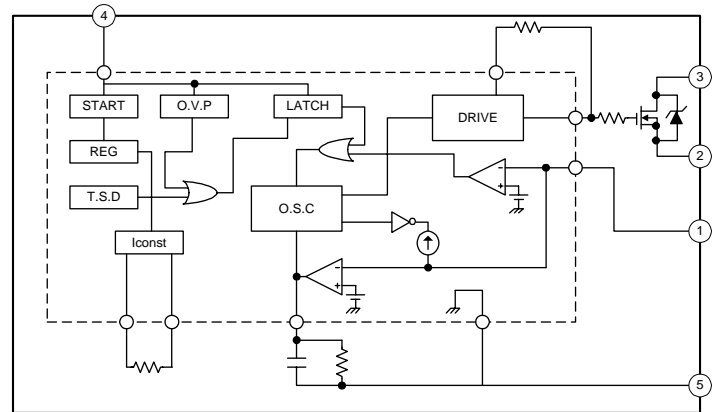
A BOARD IC501 STV 9379



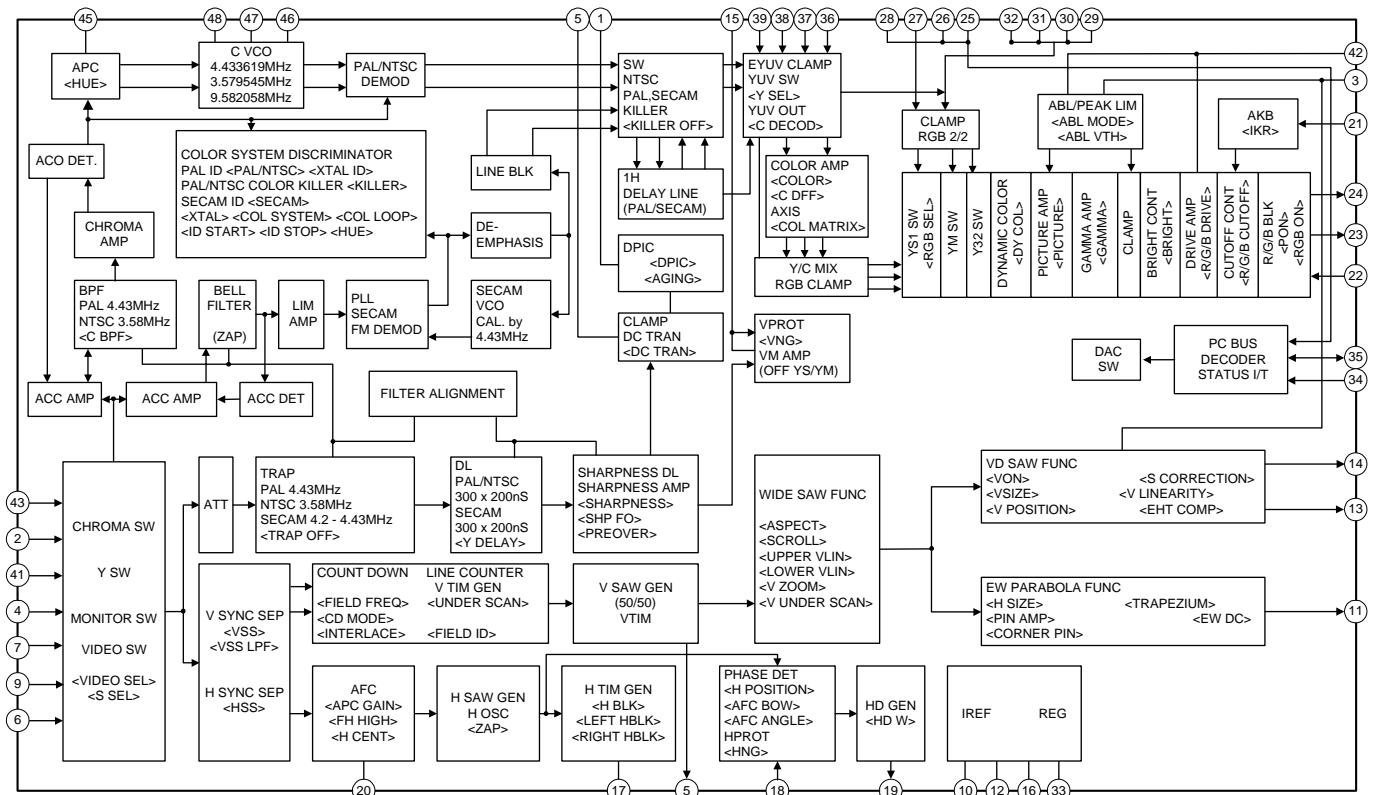
A BOARD IC101 TDA9817/V1



A BOARD IC606 STR-F6654



A BOARD IC301 CXA2060AS



SECTION 6 EXPLODED VIEWS

NOTE :

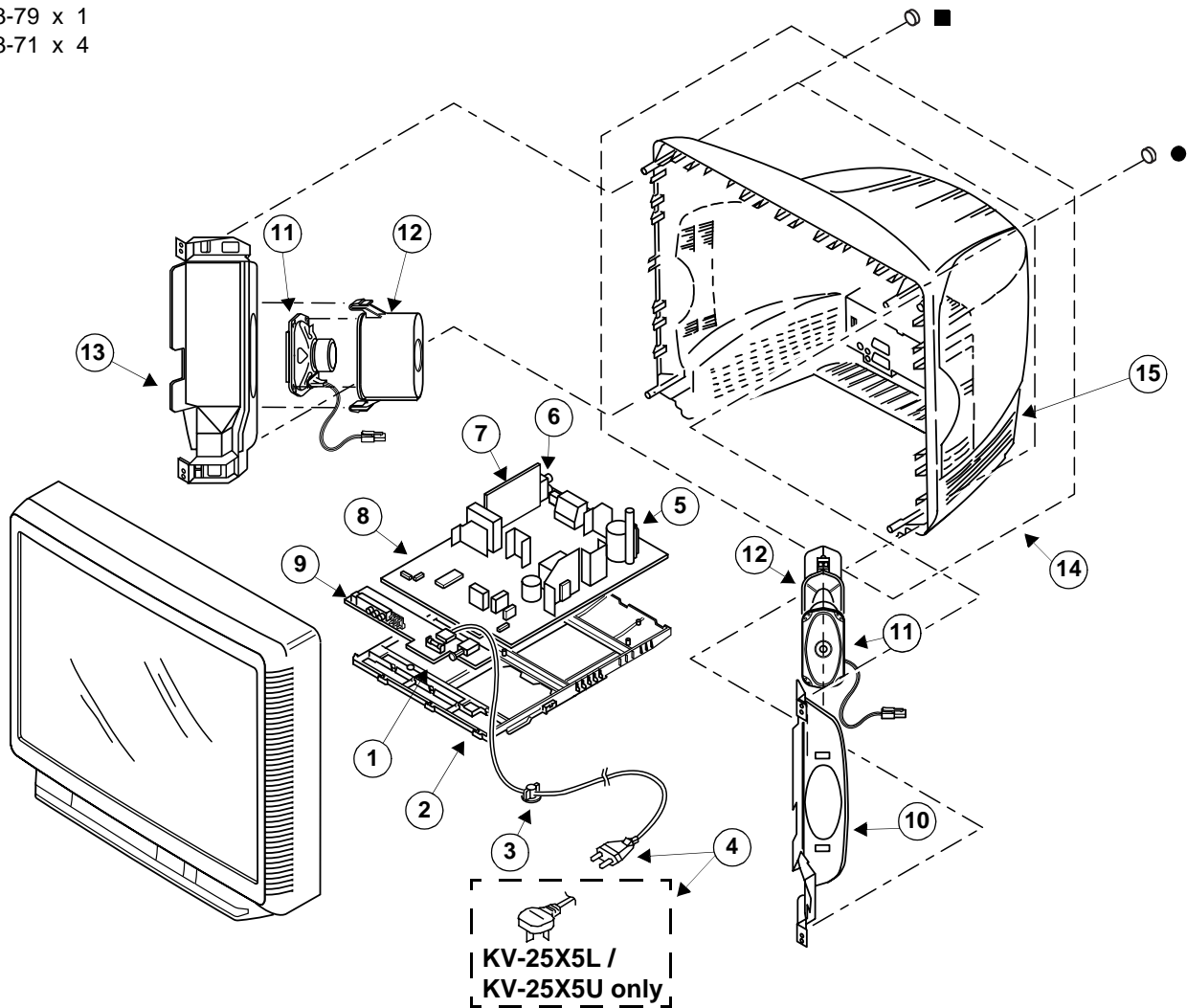
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.
- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Note : Les composants identifiés par une trame et par une marque Δ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces du numéro spécifié.

Note : The components identified by shading and marked Δ are critical for safety. Replace only with the part numbers specified in the parts list.

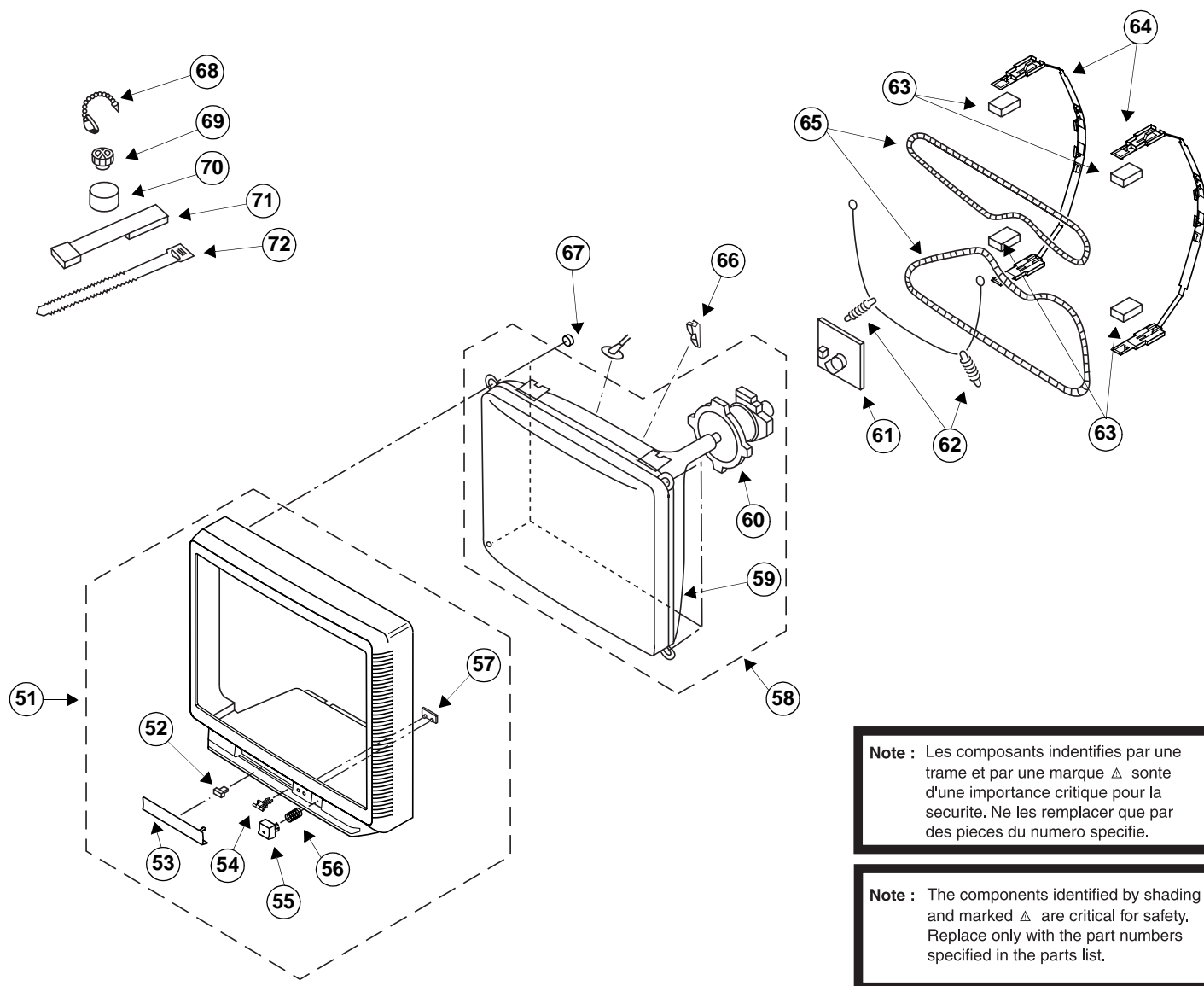
6-1. CHASSIS

- 7-685-663-79 x 1
- 7-685-663-71 x 4



REF. NO.	PART. NO.	DESCRIPTION	REMARK	REF. NO.	PART. NO.	DESCRIPTION	REMARK
1	Δ 1-571-433-21	SWITCH, PUSH (AC POWER)		8	*A-1632-750-A	A BOARD, COMPLETE (KV-25X5A)	
2	*4-204-051-01	BRACKET, MAIN			*A-1632-748-A	A BOARD, COMPLETE (KV-25X5B)	
3	4-202-531-01	AC CORD LOCK (SC)			*A-1632-746-A	A BOARD, COMPLETE (KV-25X5D)	
4	Δ 1-765-286-11	CORD, POWER (KV-25X5A/25X5B/25X5D/25X5E/25X5K/25X5R/25X5U)			*A-1632-747-A	A BOARD, COMPLETE (KV-25X5E)	
	1-776-860-11	CORD, POWER FILTER (UK) (KV-25X5L)			*A-1632-752-A	A BOARD, COMPLETE (KV-25X5K)	
5	Δ 1-453-264-11	TRANSFORMER ASSY, FLYBACK (NX1680/U2B4)			*A-1632-751-A	A BOARD, COMPLETE (KV-25X5L)	
6	1-693-418-11	TUNER (TELE9-001A) (KV-25X5A/25X5B/25X5D/25X5L)			*A-1632-753-A	A BOARD, COMPLETE (KV-25X5R)	
	8-598-432-00	TUNER (BTP-AC411) (KV-25X5E/25X5K)			*A-1632-749-A	A BOARD, COMPLETE (KV-25X5U)	
	8-598-361-01	TUNER (BTP-AC402) (KV-25X5R)		9	*A-1646-157-A	H1 BOARD, COMPLETE	
	8-598-464-01	TUNER (BTP-AU611) (KV-25X5U)		10	4-204-052-01	BAFFLE BOARD (R)	
7	*A-1652-053-A	S1 BOARD, COMPLETE (KV-25X5A/25X5D/25X5R)		11	1-503-902-11	SPEAKER (15X6.5 CM)	
	*A-1652-056-A	S1 BOARD, COMPLETE (KV-25X5B)		12	4-204-054-01	BOX, SPEAKER	
	*A-1652-052-A	S1 BOARD, COMPLETE (KV-25X5E/25X5K/25X5L/25X5U)		13	4-204-053-01	BAFFLE BOARD (L)	
				14	X-4200-375-1	REAR COVER ASSY	
				15	4-204-094-01	COVER, REAR	

6-2. PICTURE TUBE



REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
51	X-4200-377-2	BEZNET ASSY	52-57	63	4-203-390-11	CUSHION, DGC	
52	4-047-464-01	CATCHER, PUSH		64	4-202-745-01	HOLDER, DGC (25")	
53	4-204-050-01	DOOR, CONTROL (PAINTED) (BLACK)		65	Δ 1-406-806-21	COIL, DEMAGNETIZATION	
54	3-703-035-11	SHAFT, LID		66	3-704-495-01	SPACER, DY	
55	4-204-066-01	BUTTON, POWER		67	4-203-043-01	SCREW (PT)	
56	4-202-964-01	SPRING		68	4-308-870-00	CLIP, LEAD WIRE	
57	4-204-067-01	GUIDE LIGHT		69	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM \varnothing	
58	Δ 8-733-254-76	ITC	59-60	70	1-425-032-00	MAGNET, DISK; 10MM \varnothing	
59	Δ 8-733-254-05	PICTURE TUBE (SD-257) (M60LCS60X)		71	X-4387-214-1	PERMALLOY ASSY, CORRECTION	
60	Δ 8-451-404-23	DEFLECTION YOKE (Y25GXABA)		72	3-701-007-00	BAND, BINDING	
61	*A-1638-111-A	C BOARD COMPLETE					
62	4-200-433-11	SPRING, EXTENSION (KV-25X5A)					
	4-369-318-21	SPRING, TENSION (KV-25X5B/25X5D/25X5E/25X5K/25X5L/25X5R/25X5U)					

SECTION 7 ELECTRICAL PARTS LIST

When indicating parts by reference number, please include the board name.

CAPACITORS COILS
MF : mF, PF : mmF MMH : mH , uH

- Items marked “ * “ are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- RESISTORS
- All resistors are in ohms.
- F : nonflammable.

Note : Les composants identifiés par une trame et par une marque Δ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces du numéro spécifié.

Note : The components identified by shading and marked Δ are critical for safety. Replace only with the part numbers specified in the parts list.

A

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
	*A-1632-750-A	A BOARD COMPLETE (KV-25X5A) *****		C031	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
	*A-1632-748-A	A BOARD COMPLETE (KV-25X5B) *****		C032	1-163-077-00	CERAMIC CHIP 0.1MF	10% 25V
	*A-1632-746-A	A BOARD COMPLETE (KV-25X5D) *****		C033	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
	*A-1632-747-A	A BOARD COMPLETE (KV-25X5E) *****		C035	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
	*A-1632-752-A	A BOARD COMPLETE (KV-25X5K) *****		C036	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
	*A-1632-751-A	A BOARD COMPLETE (KV-25X5L) *****		C037	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
	*A-1632-753-A	A BOARD COMPLETE (KV-25X5R) *****		C038	1-126-964-11	ELECT 10MF	20% 50V
	*A-1632-749-A	A BOARD COMPLETE (KV-25X5U) *****		C039	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
	4-382-854-01	SCREW (M3X8) , P, SW (+)		C040	1-163-189-00	CERAMIC CHIP 220PF	5% 50V
	4-382-854-11	SCREW (M3X10) , P, SW (+)		C041	1-163-205-00	CERAMIC CHIP 0.001MF	10% 50V
	< CAPACITOR >			C042	1-126-933-11	ELECT 100MF	20% 16V
C004	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C043	1-126-935-11	ELECT 470MF	20% 16V
C005	1-163-105-00	CERAMIC CHIP 33PF	5% 50V	C100	1-163-038-00	CERAMIC CHIP 0.1MF	25V (KV-25X5B)
C006	1-163-105-00	CERAMIC CHIP 33PF	5% 50V	C103	1-104-665-11	ELECT 100MF	20% 25V
C007	1-126-935-11	ELECT 470MF	20% 16V	C105	1-126-965-11	ELECT 22MF	20% 50V
C008	1-126-964-11	ELECT 10MF	20% 50V	C108	1-163-465-11	CERAMIC CHIP 9PF	0.25PF 50V
C009	1-126-965-11	ELECT 22MF	20% 50V	C109	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C011	1-126-965-11	ELECT 22MF	20% 50V	C110	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C012	1-126-959-11	ELECT 0.47MF	20% 50V	C111	1-216-296-00	SHORT 0	(KV-25X5A/25X5D/25X5E/ KV-25X5K/25X5L/25X5R/ KV-25X5U)
C013	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V		1-163-059-00	CERAMIC CHIP 0.01MF	50V (KV-25X5B)
C016	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C112	1-163-031-11	CERAMIC CHIP 0.01MF	50V
C018	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C115	1-164-489-11	CERAMIC CHIP 0.22MF	10% 16V
C019	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C116	1-126-961-11	ELECT 2.2MF	20% 50V
C022	1-126-935-11	ELECT 470MF	20% 16V	C117	1-126-961-11	ELECT 2.2MF	20% 50V
C024	1-104-665-11	ELECT 100MF	20% 25V	C118	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C025	1-126-960-11	ELECT 1MF	20% 50V	C119	1-163-017-00	CERAMIC CHIP 0.0047MF	5% 50V (KV-25X5B)
C029	1-163-077-00	CERAMIC CHIP 0.1MF	10% 25V	C121	1-163-031-11	CERAMIC CHIP 0.01MF	50V (KV-25X5B)
C030	1-104-665-11	ELECT 100MF	20% 25V	C122	1-104-665-11	ELECT 100MF	20% 25V (KV-25X5B)
				C129	1-104-664-11	ELECT 47MF	20% 50V

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
C133	1-162-638-11	CERAMIC CHIP 1MF	16V (KV-25K5B)	C401	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C134	1-128-551-11	ELECT 22MF	20% 25V	C402	1-126-960-11	ELECT 1MF	20% 50V
C135	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C403	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
				C405	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C137	1-163-017-91	CERAMIC 4700PF	10% 50V	C406	1-126-960-11	ELECT 1MF	20% 50V
C138	1-165-319-11	CERAMIC CHIP 0.1MF	50V	C407	1-126-964-11	ELECT 10MF	20% 50V
C139	1-163-031-11	CERAMIC CHIP 0.01MF	50V	C408	1-126-964-11	ELECT 10MF	20% 50V
C140	1-163-031-11	CERAMIC CHIP 0.01MF	50V	C410	1-126-964-11	ELECT 10MF	20% 50V
C143	1-104-664-11	ELECT 47MF	20% 25V	C413	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C160	1-163-017-91	CERAMIC 4700PF	10% 50V	C414	1-126-960-11	ELECT 1MF	20% 50V
C201	1-104-666-11	ELECT 220MF	20% 25V	C415	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C203	1-126-942-61	ELECT 1000MF	20% 25V	C416	1-126-964-11	ELECT 10MF	20% 50V
C204	1-126-942-61	ELECT 1000MF	20% 25V	C417	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C206	1-126-960-11	ELECT 1MF	20% 50V	C418	1-126-960-11	ELECT 1MF	20% 50V
C207	1-126-972-11	ELECT 1000MF	20% 50V	C422	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C208	1-126-960-11	ELECT 1MF	20% 50V	C423	1-126-964-11	ELECT 10MF	20% 50V
C215	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C430	1-104-664-11	ELECT 47MF	20% 25V
C301	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C432	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C302	1-126-967-11	ELECT 47MF	20% 16V	C433	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C303	1-101-004-00	CERAMIC 0.01MF	50V	C434	1-126-935-11	ELECT 470MF	20% 16V
C304	1-126-964-11	ELECT 10MF	20% 50V	C435	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C305	1-163-005-11	CERAMIC CHIP 470PF	10% 50V	C436	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C307	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C437	1-535-465-11	LEAD, JUMPER (5.0MM)	
C308	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C438	1-535-465-11	LEAD, JUMPER (5.0MM)	
C309	1-126-963-11	ELECT 4.7MF	20% 50V	C443	1-102-125-00	CERAMIC 0.0047MF	10% 50V
C312	1-163-099-00	CERAMIC CHIP 18PF	5% 50V	C444	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C313	1-163-099-00	CERAMIC CHIP 18PF	5% 50V	C445	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C314	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C501	1-126-968-11	ELECT 100MF	20% 50V
C316	1-163-259-91	CERAMIC CHIP 220PF	5% 50V	C502	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C317	1-136-169-00	FILM 0.22MF	5% 50V	C503	1-126-968-11	ELECT 100MF	20% 50V
C319	1-126-964-11	ELECT 10MF	20% 50V	C504	1-106-220-00	MYLAR 0.1MF	10% 100V
C321	1-126-963-11	ELECT 4.7MF	20% 50V	C505	1-136-173-00	FILM 0.47MF	5% 50V
C322	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C506	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C328	1-104-664-11	ELECT 47MF	20% 25V	C507	1-126-933-11	ELECT 100MF	20% 16V
C329	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C508	1-126-960-11	ELECT 1MF	20% 50V
C330	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C509	1-137-047-11	FILM 0.01MF	10% 400V
C331	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C510	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C332	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C512	1-162-114-00	CERAMIC 0.0047MF	2KV
C333	1-126-960-91	ELECT 1MF	20% 50V	C513	1-107-662-11	ELECT 22MF	20% 250V
C334	1-163-071-91	CERAMIC CHIP 4700PF	10% 50V	C515	1-104-666-11	ELECT 220MF	20% 25V
C335	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C517	1-104-666-11	ELECT 220MF	20% 25V
C336	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C518	1-106-375-12	MYLAR 0.022MF	99% 200V
C337	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C519	1-163-275-11	CERAMIC CHIP 0.001MF	5% 50V
C338	1-126-967-11	ELECT 47MF	20% 50V	C520	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C339	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C522	1-130-495-00	FILM 0.1MF	5% 50V
C350	1-163-017-91	CERAMIC 4700PF	10% 50V	C531	1-126-964-11	ELECT 10MF	20% 50V
C351	1-163-017-91	CERAMIC 4700PF	10% 50V	C532	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V

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The components identified by shading and marked Δ are critical for safety
Replace only with the part number specified.

REF. NO.	PART.NO	DESCRIPTION	REMARK
C533	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V (KV-25X5B)
C535	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C536	1-115-522-11	FILM 1MF	5% 200V
C537	1-137-417-11	MYLAR 0.0047MF	10% 200V
C538	1-164-004-71	CERAMIC 0.1MF	10% 25V
C539	1-111-230-91	ELECT 1MF	20% 250V
C540	1-137-051-91	FILM 0.033MF	10% 200V
C541	1-106-383-00	MYLAR 0.047MF	10% 200V
C542	1-162-134-11	CERAMIC 470PF	10% 2KV
C543	1-162-134-11	CERAMIC 470PF	10% 2KV
C544	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C545	1-126-960-11	ELECT 1MF	20% 50V
C546	1-130-895-00	FILM 0.056MF	5% 400V
C547	1-117-813-11	FILM 0.75MF	5% 200V
C548	1-162-134-11	CERAMIC 470PF	10% 2KV
C550	1-107-638-11	ELECT 33MF	20% 160V
C552	1-102-212-00	CERAMIC 820PF	10% 500V
C553	1-137-417-11	MYLAR 0.0047MF	10% 200V
C555	1-117-717-11	FILM 17000PF	3% 1.2KV
C571	1-123-024-21	ELECT 33MF	160V
C572	1-104-665-11	ELECT 100MF	20% 25V
C580	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C582	1-163-275-11	CERAMIC CHIP 0.001MF	5% 50V
C584	1-126-963-11	ELECT 4.7MF	20% 50V
C601 Δ	1-107-563-11	FILM 0.1MF	20% 300V
C602 Δ	1-107-563-11	FILM 0.1MF	20% 300V
C603 Δ	1-117-700-51	CERAMIC 0.0022MF	20% 250V
C604 Δ	1-117-700-51	CERAMIC 0.0022MF	20% 250V
C605	1-104-652-11	ELECT 470MF	20% 10V
C606	1-125-555-11	ELECT(BLOCK) 330MF	20% 400V (KV-25X5A/25X5B/25X5D/25X5E/25X5L/25X5U)
	1-117-752-11	ELECT(BLOCK) 330MF	20% 450V (KV-25X5R)
C607	1-125-787-51	CERAMIC 680PF	10% 2KV
C609	1-107-915-51	ELECT 2200MF	20% 50V
C610	1-104-665-11	ELECT 100MF	20% 25V
C611	1-165-127-11	CERAMIC 470PF	10% 500V
C612 Δ	1-161-964-51	CERAMIC 0.0047MF	250V
C613 Δ	1-161-964-51	CERAMIC 0.0047MF	250V
C614 Δ	1-161-964-51	CERAMIC 4700PF	250V
C615	1-130-202-00	FILM 0.022MF	10% 400V
C618	1-107-890-11	ELECT 2200MF	20% 25V
C621	1-163-005-11	CERAMIC CHIP 470PF	10% 50V
C622 Δ	1-161-964-51	CERAMIC 0.0047MF	250V
C624	1-104-665-11	ELECT 100MF	20% 25V
C625	1-104-665-11	ELECT 100MF	20% 25V

REF. NO.	PART.NO	DESCRIPTION	REMARK
C628	1-124-347-00	ELECT 100MF	20% 160V
C629	1-136-189-00	FILM 0.1MF	10% 250V
C630	1-165-127-11	CERAMIC 470PF	10% 500V
C633	1-104-332-11	CERAMIC 470PF	10% 2KV
C635	1-107-675-11	ELECT 1MF	20% 160V
C638	1-107-670-11	ELECT 10MF	20% 400V (KV-25X5A/25X5B/25X5D/25X5E/ KV-25X5K/25X5L/25X5U)
	1-107-679-91	ELECT 10MF	20% 450V (KV-25X5R)
C639	1-104-665-11	ELECT 100MF	20% 25V
C640	1-104-664-11	ELECT 47MF	20% 25V
C641	1-104-665-11	ELECT 100MF	20% 25V
C642	1-104-665-11	ELECT 100MF	20% 25V
C646	1-107-974-11	CERAMIC 47PF	5% 2KV
< FILTER >			
CF101	1-404-134-00	TRAP, CERAMIC (5.5MHZ)	
CF105	1-760-154-11	TRAP, CERAMIC (KV-25X5B)	
SWF101	1-767-874-11	FILTER, SURFACE WAVE (KV-25X5A/25X5D/25X5E/25X5K/25X5R/25X5U)	
	1-579-273-11	FILTER, SURFACE WAVE (KV-25X5B/25X5L)	
SWF102	1-767-873-11	FILTER, SURFACE WAVE	
SWF103	1-767-083-11	FILTER, SURFACE WAVE (KV-25X5B)	
< CONNECTOR >			
CN001	*1-564-508-11	PLUG, CONNECTOR 5P	
CN007	*1-564-510-11	PLUG, CONNECTOR 7P	
CN101	1-766-922-11	CONNECTOR, BOARD TO BOARD 18P	
CN201	*1-564-507-11	PLUG, CONNECTOR 4P	
CN208	*1-564-508-11	PLUG, CONNECTOR 5P	
CN406	1-564-511-11	PLUG, CONNECTOR 8P	
CN501	*1-580-798-11	CONNECTOR PIN (DY) 6P	
CN502	1-691-135-11	PIN, CONNECTOR (PC BOARD) 4P	
CN504	*1-564-509-11	PLUG, CONNECTOR 6P	
CN506	1-695-915-11	TAB (CONTACT)	
CN602 Δ	1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P	
CN603 Δ	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P	
CN606 Δ	*1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P	
< DIODE >			
D001	8-719-109-89	DIODE RD5.6ESB2	
D002	8-719-109-89	DIODE RD5.6ESB2	
D004	8-719-109-89	DIODE RD5.6ESB2	
D005	8-719-109-89	DIODE RD5.6ESB2	
D007	8-719-109-89	DIODE RD5.6ESB2	

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
D008	8-719-991-33	DIODE 1SS133T-77		D539	8-719-900-26	DIODE ERD29-08J	
D009	8-719-109-89	DIODE RD5.6ESB2		D541	1-535-465-11	LEAD, JUMPER (5.0MM)	
D010	8-719-109-89	DIODE RD5.6ESB2		D571	8-719-911-19	DIODE 1SS119-25	
D011	8-719-109-89	DIODE RD5.6ESB2		D573	8-719-921-40	DIODE MTZJ-4.7C	
D012	8-719-914-43	DIODE DAN202K		D601	8-719-510-53	DIODE D4SB60L	
D014	8-719-058-24	DIODE RB501V-40TE-17		D602	8-719-046-74	DIODE AU-01Z-V1	
D015	8-719-914-43	DIODE DAN202K		D603	8-719-312-61	DIODE EU-1Z	
D017	8-719-109-89	DIODE RD5.6ESB2		D605	8-719-312-10	DIODE RU4AM-T3	
D018	8-719-991-33	DIODE 1SS133T-77		D608	8-719-067-88	DIODE RG1CLF-B1	
D023	8-719-109-89	DIODE RD5.6ESB2		D610	8-719-067-78	DIODE RN3Z-LF014-302	
D101	8-719-982-24	DIODE MTZJ-33A		D613	8-719-911-19	DIODE 1SS119-25	
D104	8-719-914-43	DIODE DAN202K	(KV-25X5B)	D614	8-719-058-38	DIODE FMN-G12S	
D201	8-719-929-15	DIODE HZS9.1NB2		D619	8-719-043-76	DIODE AK04V0	
D202	8-719-914-43	DIODE DAN202K		D621	8-719-068-00	DIODE ERC04-06SE	
D204	8-719-109-89	DIODE RD5.6ESB2		D626	8-719-068-00	DIODE ERC04-06SE	
D205	8-719-109-89	DIODE RD5.6ESB2		D627	8-719-510-26	DIODE D1NL20	
D206	8-719-109-89	DIODE RD5.6ESB2		D628	8-719-059-23	DIODE P6KE200AG23	
D306	8-719-109-89	DIODE RD5.6ESB2		D629	8-719-979-64	DIODE UF4005PKG23	
D307	8-719-109-89	DIODE RD5.6ESB2		D631	8-719-110-31	DIODE RD12ES-B2	
D308	8-719-109-72	DIODE RD3.9ESB2		D632	8-719-510-64	DIODE S2LA20F	
D309	8-719-991-33	DIODE 1SS133T-77		D633	8-719-109-89	DIODE RD5.6ESB2	
D320	8-719-923-67	DIODE MTZJ-9.1B		< FERRITE BEAD >			
D402	8-719-923-38	DIODE MTZJ-5.6B		FB001	1-412-911-11	FERRITE	0UH
D405	8-719-109-97	DIODE RD6.8ESB2		FB002	1-412-911-11	FERRITE	0UH
D406	8-719-109-97	DIODE RD6.8ESB2		FB601	1-412-911-11	FERRITE	0UH
D407	8-719-109-97	DIODE RD6.8ESB2		FB602	1-412-911-11	FERRITE	0UH
D408	8-719-923-67	DIODE MTZJ-9.1B		FB605	1-410-397-21	FERRITE	1.1UH
D409	8-719-109-97	DIODE RD6.8ESB2		FB608	1-412-911-11	FERRITE	0UH
D410	8-719-923-38	DIODE MTZJ-5.6B		FB609	1-535-465-11	LEAD, JUMPER (5.0MM)	
D414	8-719-109-97	DIODE RD6.8ESB2		FB610	1-410-397-21	FERRITE	1.1UH
D415	8-719-929-15	DIODE HZS9.1NB2		FB611	1-410-397-21	FERRITE	1.1UH
D417	8-719-929-15	DIODE HZS9.1NB2		FB612	1-535-465-11	LEAD, JUMPER (5.0MM)	
D418	8-719-923-67	DIODE MTZJ-9.1B		< IC >			
D419	8-719-923-67	DIODE MTZJ-9.1B		IC001	8-759-525-78	IC SAA5497PS/M1A/040	(KV-25X5A/25X5D)
D422	8-719-109-97	DIODE RD6.8ES-B2			8-759-526-01	IC SAA5497PS/M1A/038	(KV-25X5B/25X5E/25X5K/ KV-25X5L/25X5U)
D423	8-719-109-97	DIODE RD6.8ESB2			8-759-525-77	IC SAA5497PS/M1A/039	(KV-25X5R)
D427	8-719-923-67	DIODE MTZJ-9.1B		IC003	8-759-468-56	IC MN1381T	
D501	8-719-302-43	DIODE EL1Z		IC004	8-759-432-33	IC ST24W08FM6TR	
D502	8-719-924-13	DIODE MTZJ-T-77-22B		IC005	8-759-516-41	IC CD4052BCM	
D511	8-719-028-72	DIODE RGP02-17EL-6433		IC101	8-759-466-49	IC TDA9817/V1	(KV-25X5A/25K5D/25K5E/25K5K/ KV-25K5L/25K5R/25K5U)
D512	8-719-302-43	DIODE EL1Z			8-759-466-47	IC TDA9818/V1	(KV-25X5B)
D513	8-719-979-85	DIODE EGP20G		IC201	8-759-442-74	IC TDA7495	
D514	8-719-979-85	DIODE EGP20G		IC301	8-752-082-35	IC CXA2060AS	
D534	8-719-302-43	DIODE EL1Z					
D535	8-719-908-03	DIODE GP08D					
D536	8-719-945-80	DIODE ERC06-15S					
D538	8-719-908-03	DIODE GP08D					

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The components identified by shading and marked Δ are critical for safety
Replace only with the part number specified.

REF. NO.	PART.NO	DESCRIPTION	REMARK	REF. NO.	PART.NO	DESCRIPTION	REMARK
IC501	8-759-192-71	IC STV9379		< TRANSISTOR >			
IC531	8-759-450-95	IC LM393N		Q004	8-729-216-22	TRANSISTOR 2SA1162-G	
IC603	8-749-920-61	IC SE135N		Q005	1-801-806-11	TRANSISTOR DTC144EKA	
IC604	8-759-524-82	IC TYA7805CTV		Q006	1-801-806-11	TRANSISTOR DTC144EKA	
IC605	8-759-524-83	IC TYA7809CTV		Q007	8-729-620-06	TRANSISTOR 2SC3052-EF	
IC606	8-749-013-75	IC STR-F6654		Q008	8-729-620-06	TRANSISTOR 2SC3052-EF	
IC608	8-759-524-82	IC TYA7805CTV		Q009	8-729-620-06	TRANSISTOR 2SC3052-EF	
IC609	8-759-468-89	IC TOP209P		Q010	8-729-620-06	TRANSISTOR 2SC3052-EF	
< PHOTO COUPLER >				Q011	1-801-806-11	TRANSISTOR DTC144EKA	
PH601 Δ	8-749-010-64	PHOTO COUPLER PC123F2		Q012	8-729-620-06	TRANSISTOR 2SC3052-EF	
< SOCKET >				Q014	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
J401	1-766-296-11	CONNECTOR, DUAL SCART		Q101	8-729-216-22	TRANSISTOR 2SA1162-G	
J404	1-784-632-11	JACK, PIN 2P		Q107	8-729-022-54	TRANSISTOR 2SC3779C,D-AA	(KV-25X5B)
< COIL >				Q109	1-801-806-11	TRANSISTOR DTC144EKA	(KV-25X5B)
L001	1-408-603-31	INDUCTOR	10UH	Q110	1-801-806-11	TRANSISTOR DTC144EKA	(KV-25X5B)
L102	1-408-599-21	INDUCTOR	4.7UH	Q111	8-729-216-22	TRANSISTOR 2SA1162-G	(KV-25X5B)
L103	1-403-686-11	COIL		Q112	1-801-806-11	TRANSISTOR DTC144EKA	(KV-25X5B)
L104	1-410-671-31	INDUCTOR	47UH	Q202	8-729-620-06	TRANSISTOR 2SC3052-EF	
L106	1-408-417-00	INDUCTOR	47UH	Q401	8-729-920-72	TRANSISTOR 2SA1037K	
L108	1-410-985-11	INDUCTOR CHIP	0.22UH	Q405	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
L109	1-410-789-11	INDUCTOR	0.47UH	Q408	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
L201	1-535-465-11	LEAD, JUMPER (5.0MM)		Q501	8-729-620-06	TRANSISTOR 2SC3052-EF	
L202	1-535-465-11	LEAD, JUMPER (5.0MM)		Q532	8-729-038-83	TRANSISTOR 2SK2251-01-F19	
L203	1-406-979-11	INDUCTOR	0UH	Q533	8-729-040-62	TRANSISTOR 2SD2539 (LBSONY)	
L302	1-408-417-00	INDUCTOR	47UH	Q535	8-729-119-80	TRANSISTOR 2SC2688-LK	
L303	1-408-609-41	INDUCTOR	33UH	Q571	8-729-105-08	TRANSISTOR 2SA1330-T106	
L401	1-408-417-00	INDUCTOR	47UH	Q574	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
L402	1-408-417-00	INDUCTOR	47UH	Q575	1-801-806-11	TRANSISTOR DTC144EKA	
L405	1-216-295-00	SHORT	0	Q576	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
L406	1-216-295-00	SHORT	0	Q601	8-729-216-22	TRANSISTOR 2SA1162-G	
L501	1-408-417-00	INDUCTOR	47UH	< RESISTOR >			
L502	1-412-529-11	INDUCTOR	22UH	JR012	1-216-295-00	SHORT	0 (KV-25X5A/25X5D/25X5E/ KV-25X5K/25X5L/25X5R/ KV-25X5U)
L503	1-412-521-31	INDUCTOR	4.7UH	JR023	1-216-296-00	SHORT	0
L532	1-412-553-41	INDUCTOR	3.3MMH	JR031	1-216-295-00	SHORT	0
L533	1-406-989-21	INDUCTOR	0UH	JR113	1-216-295-00	SHORT	0
L535	1-459-111-00	INDUCTOR	0UH	JR403	1-216-073-00	RES,CHIP	10K 5% 1/10W
L537	1-416-214-11	COIL, HORIZONTAL LINEARITY		JR409	1-216-295-00	SHORT	0
L540	1-535-465-11	LEAD, JUMPER (5.0MM)		JR411	1-216-295-00	SHORT	0
L571	1-412-533-21	INDUCTOR	47UH	JR412	1-216-295-00	SHORT	0
L602	1-408-471-00	INDUCTOR	47UH	JR610	1-216-296-00	SHORT	0
				JR613	1-216-296-00	SHORT	0
				JW220	8-719-923-38	DIODE MTZJ-5.6B	
				R001	1-216-025-00	RES,CHIP	100 5% 1/10W

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
R002	1-216-025-00	RES,CHIP	100 5% 1/10W	R081	1-216-073-00	RES,CHIP	10K 5% 1/10W
R003	1-216-065-00	RES,CHIP	4.7K 5% 1/10W	R082	1-216-053-00	RES,CHIP	1.5K 5% 1/10W
R004	1-216-065-00	RES,CHIP	4.7K 5% 1/10W	R083	1-216-031-00	RES,CHIP	180 5% 1/10W
R005	1-216-065-00	RES,CHIP	4.7K 5% 1/10W	R084	1-216-053-00	RES,CHIP	1.5K 5% 1/10W
R007	1-216-065-00	RES,CHIP	4.7K 5% 1/10W	R085	1-216-031-00	RES,CHIP	180 5% 1/10W
R009	1-216-025-00	RES,CHIP	100 5% 1/10W	R086	1-216-053-00	RES,CHIP	1.5K 5% 1/10W
R010	1-216-025-00	RES,CHIP	100 5% 1/10W	R087	1-216-180-00	RES,CHIP	180 5% 1/8W
R011	1-216-025-00	RES,CHIP	100 5% 1/10W	R088	1-216-065-00	RES,CHIP	4.7K 5% 1/10W
R012	1-247-807-31	CARBON	100 5% 1/4W	R093	1-216-230-00	RES,CHIP	22K 5% 1/8W
R013	1-216-214-00	RES,CHIP	4.7K 5% 1/8W	R094	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R014	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R095	1-216-025-00	RES,CHIP	100 5% 1/10W
R015	1-216-049-00	RES,CHIP	1K 5% 1/10W	R096	1-247-807-31	CARBON	100 5% 1/4W
R016	1-216-073-00	RES,CHIP	10K 5% 1/10W	R097	1-247-807-31	CARBON	100 5% 1/4W
R019	1-216-053-00	RES,CHIP	1.5K 5% 1/10W	R098	1-247-807-31	CARBON	100 5% 1/4W
R023	1-216-295-00	SHORT	0	R099	1-247-807-31	CARBON	100 5% 1/4W
R029	1-216-073-00	RES,CHIP	10K 5% 1/10W	R101	1-216-049-00	RES,CHIP	1K 5% 1/10W
R032	1-216-089-00	RES,CHIP	47K 5% 1/10W	R106	1-215-900-11	METAL OXIDE	22K 5% 2W F
R034	1-216-065-00	RES,CHIP	4.7K 5% 1/10W	R110	1-216-296-91	SHORT	0 (KV-25X5B)
R035	1-216-049-00	RES,CHIP	1K 5% 1/10W	R111	1-216-057-00	RES,CHIP	2.2K 5% 1/10W (KV-25X5B)
R036	1-216-065-00	RES,CHIP	4.7K 5% 1/10W	R112	1-216-057-00	RES,CHIP	2.2K 5% 1/10W (KV-25X5B)
R038	1-216-073-00	RES,CHIP	10K 5% 1/10W	R116	1-249-437-11	CARBON	47K 5% 1/4W (KV-25X5E/25X5K/25X5U)
R039	1-216-089-00	RES,CHIP	47K 5% 1/10W	R120	1-216-037-00	RES,CHIP	330 5% 1/10W
R050	1-216-041-00	RES,CHIP	470 5% 1/10W	R121	1-216-025-00	RES,CHIP	100 5% 1/10W
R051	1-216-049-00	RES,CHIP	1K 5% 1/10W	R122	1-216-025-00	RES,CHIP	100 5% 1/10W
R053	1-216-065-00	RES,CHIP	4.7K 5% 1/10W	R127	1-216-031-00	RES,CHIP	180 5% 1/10W (KV-25X5B)
R054	1-216-041-00	RES,CHIP	470 5% 1/10W	R128	1-216-065-00	RES,CHIP	4.7K 5% 1/10W (KV-25X5B)
R055	1-216-081-00	RES,CHIP	22K 5% 1/10W	R129	1-216-063-91	RES,CHIP	3.9K 5% 1/10W (KV-25X5B)
R056	1-216-105-00	RES,CHIP	220K 5% 1/10W	R133	1-216-295-00	SHORT	0 (KV-25X5A/25X5D/25X5E/25X5K/ KV-25X5L/25X5R/25X5U)
R057	1-216-075-00	RES,CHIP	12K 5% 1/10W	R142	1-216-295-00	SHORT	0
R058	1-216-063-91	RES,CHIP	3.9K 5% 1/10W	R143	1-216-025-00	RES,CHIP	100 5% 1/10W
R059	1-216-089-00	RES,CHIP	47K 5% 1/10W	R144	1-216-079-00	RES,CHIP	18K 5% 1/10W
R060	1-216-174-00	RES,CHIP	100 5% 1/8W	R145	1-216-212-00	RES,CHIP	3.9K 5% 1/8W
R061	1-216-174-00	RES,CHIP	100 5% 1/8W	R147	1-216-017-91	RES,CHIP	47 5% 1/10W (KV-25X5B)
R062	1-216-033-00	RES,CHIP	220 5% 1/10W	R148	1-216-174-00	RES,CHIP	100 5% 1/8W (KV-25X5B)
R063	1-216-065-00	RES,CHIP	4.7K 5% 1/10W	R149	1-216-049-00	RES,CHIP	1K 5% 1/10W (KV-25X5B)
R064	1-216-065-00	RES,CHIP	4.7K 5% 1/10W	R151	1-216-049-00	RES,CHIP	1K 5% 1/10W
R065	1-216-025-00	RES,CHIP	100 5% 1/10W	R152	1-216-025-00	RES,CHIP	100 5% 1/10W (KV-25X5B)
R066	1-216-065-00	RES,CHIP	4.7K 5% 1/10W	R153	1-216-180-00	RES,CHIP	180 5% 1/8W (KV-25X5B)
R067	1-216-065-00	RES,CHIP	4.7K 5% 1/10W	R154	1-216-238-91	RES,CHIP	47K 5% 1/8W
R069	1-216-049-00	RES,CHIP	1K 5% 1/10W	R155	1-216-089-00	RES,CHIP	47K 5% 1/10W
R070	1-216-081-00	RES,CHIP	22K 5% 1/10W	R156	1-216-073-00	RES,CHIP	10K 5% 1/10W (KV-25X5B)
R071	1-216-214-00	RES,CHIP	4.7K 5% 1/8W	R157	1-216-063-91	RES,CHIP	3.9K 5% 1/10W (KV-25X5B)
R072	1-216-097-00	RES,CHIP	100K 5% 1/10W	R158	1-216-069-00	RES,CHIP	6.8K 5% 1/10W (KV-25X5B)
R073	1-216-097-00	RES,CHIP	100K 5% 1/10W	R204	1-247-863-91	CARBON	22K 5% 1/4W
R075	1-216-069-00	RES,CHIP	6.8K 5% 1/10W	R206	1-216-085-00	RES,CHIP	33K 5% 1/10W
R077	1-216-083-00	RES,CHIP	27K 5% 1/10W				
R080	1-216-073-00	RES,CHIP	10K 5% 1/10W				

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REF. NO.	PART.NO	DESCRIPTION	REMARK			REF. NO.	PART.NO	DESCRIPTION	REMARK		
R207	1-216-295-00	SHORT	0			R417	1-247-804-11	CARBON	75	5%	1/4W
R209	1-216-065-00	RES,CHIP	4.7K	5%	1/10W				(KV-25X5A/25X5B/25X5D/25X5E/ KV-25X5K/25X5L/25X5R)		
R211	1-215-873-00	METAL OXIDE	4.7K	5%	1W F		1-247-698-11	CARBON	68	5%	1/4W (KV-25X5U)
R213	1-216-089-00	RES,CHIP	47K	5%	1/10W	R418	1-260-095-11	CARBON	470	5%	1/2W
R301	1-216-025-00	RES,CHIP	100	5%	1/10W				(KV-25X5A/25X5D/25X5E/25X5L/25X5R)		
R302	1-216-081-00	RES,CHIP	22K	5%	1/10W		1-249-413-11	CARBON	470	5%	1/4W
R303	1-216-073-00	RES,CHIP	10K	5%	1/10W				(KV-25X5B/25X5K)		
R304	1-216-073-00	RES,CHIP	10K	5%	1/10W		1-249-414-11	CARBON	560	5%	1/4W (KV-25X5U)
R306	1-216-206-00	RES,CHIP	2.2K	5%	1/8W						
R309	1-216-675-11	METAL CHIP	10K	0.50%	1/10W	R419	1-216-022-00	RES,CHIP	75	5%	1/10W
R310	1-216-022-00	RES,CHIP	75	5%	1/10W	R420	1-216-041-00	RES,CHIP	470	5%	1/10W
R311	1-216-022-00	RES,CHIP	75	5%	1/10W	R421	1-216-113-00	RES,CHIP	470K	5%	1/10W
R313	1-216-025-00	RES,CHIP	100	5%	1/10W	R422	1-216-295-00	SHORT	0		
R314	1-216-025-00	RES,CHIP	100	5%	1/10W	R425	1-216-077-00	RES,CHIP	15K	5%	1/10W
R315	1-216-075-91	RES,CHIP	12K	5%	1/10W						
R316	1-216-025-00	RES,CHIP	100	5%	1/10W	R426	1-216-073-00	RES,CHIP	10K	5%	1/10W
R317	1-216-049-00	RES,CHIP	1K	5%	1/10W	R427	1-216-113-00	RES,CHIP	470K	5%	1/10W
R318	1-216-025-00	RES,CHIP	100	5%	1/10W	R429	1-216-041-00	RES,CHIP	470	5%	1/10W
R319	1-216-025-00	RES,CHIP	100	5%	1/10W	R430	1-216-113-00	RES,CHIP	470K	5%	1/10W
R320	1-216-025-00	RES,CHIP	100	5%	1/10W	R431	1-216-295-00	SHORT	0		
R321	1-216-025-00	RES,CHIP	100	5%	1/10W	R432	1-216-113-00	RES,CHIP	470K	5%	1/10W
R323	1-216-025-00	RES,CHIP	100	5%	1/10W	R435	1-216-022-00	RES,CHIP	75	5%	1/10W
R324	1-412-002-21	INDUCTOR	4.7UH			R436	1-216-041-00	RES,CHIP	470	5%	1/10W
R325	1-412-002-21	INDUCTOR	4.7UH			R439	1-216-041-00	RES,CHIP	470	5%	1/10W
R326	1-216-129-00	RES,CHIP	2.2M	5%	1/10W	R440	1-216-113-00	RES,CHIP	470K	5%	1/10W
R331	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	R441	1-216-295-00	SHORT	0		
R332	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	R442	1-216-077-00	RES,CHIP	15K	5%	1/10W
R333	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	R443	1-216-073-00	RES,CHIP	10K	5%	1/10W
R334	1-216-025-00	RES,CHIP	100	5%	1/10W	R450	1-216-041-00	RES,CHIP	470	5%	1/10W
R335	1-216-025-00	RES,CHIP	100	5%	1/10W	R454	1-216-041-00	RES,CHIP	470	5%	1/10W
R337	1-216-065-00	RES,CHIP	4.7K	5%	1/10W	R457	1-216-025-00	RES,CHIP	100	5%	1/10W
R338	1-216-049-00	RES,CHIP	1K	5%	1/10W	R459	1-247-807-31	CARBON	100	5%	1/4W
R401	1-216-113-00	RES,CHIP	470K	5%	1/10W	R460	1-249-403-11	CARBON	68	5%	1/4W
R402	1-216-295-71	CONDUCTOR CHIP				R501	1-216-081-00	RES,CHIP	22K	5%	1/10W
R403	1-216-041-00	RES,CHIP	470	5%	1/10W	R502	1-216-097-00	RES,CHIP	100K	5%	1/10W
R404	1-216-113-00	RES,CHIP	470K	5%	1/10W	R503	1-215-888-00	METAL OXIDE	220	5%	2W F
R405	1-216-295-00	SHORT	0			R504	1-249-385-11	CARBON	2.2	5%	1/4W F
R406	1-216-113-00	RES,CHIP	470K	5%	1/10W	R505	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R408	1-216-022-00	RES,CHIP	75	5%	1/10W	R506	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R409	1-216-029-71	RES,CHIP	150	5%	1/10W	R507	1-216-349-00	METAL OXIDE	1	5%	1W F
R410	1-216-029-71	RES,CHIP	150	5%	1/10W	R508	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R411	1-216-022-00	RES,CHIP	75	5%	1/10W	R509	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R412	1-216-029-71	RES,CHIP	150	5%	1/10W	R510	1-216-081-00	RES,CHIP	22K	5%	1/10W
R413	1-216-295-00	SHORT	0			R511	1-215-869-11	METAL OXIDE	1K	5%	1W F
R414	1-216-022-00	RES,CHIP	75	5%	1/10W	R512	1-249-377-11	CARBON	0.47	5%	1/4W F
R415	1-216-022-00	RES,CHIP	75	5%	1/10W	R513	1-216-097-00	RES,CHIP	100K	5%	1/10W
						R514	1-249-377-11	CARBON	0.47	5%	1/4W F
						R515	1-249-377-11	CARBON	0.47	5%	1/4W F

The components identified by shading and marked Δ are critical for safety
Replace only with the part number specified.

KV-25X5

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REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
R516	1-249-493-11	CARBON	56K 5% 1/2W	R603	1-202-933-61	FUSIBLE 0.1 10% 1/2W	F
R517	1-249-434-11	CARBON	27K 5% 1/4W	R607 Δ 1-202-961-11	CEMENTED	1.8 5% 10W	
R518	1-216-065-00	RES,CHIP	4.7K 5% 1/10W	R608	1-215-927-00	METAL OXIDE	47K 5% 3W F
R520	1-215-884-11	METAL OXIDE	47 5% 2W F	R611	1-249-415-11	CARBON	680 5% 1/4W
R521	1-216-117-00	RES,CHIP	680K 5% 1/10W	R613 Δ 1-240-030-91	METAL	4.7M 5% 1/2W	
R522	1-216-097-00	RES,CHIP	100K 5% 1/10W	R614 Δ 1-240-030-91	METAL	4.7M 5% 1/2W	
R523	1-216-121-91	RES,CHIP	1M 5% 1/10W	R615	1-249-422-11	CARBON	2.7K 5% 1/4W
R524	1-216-083-91	RES,CHIP	27K 5% 1/10W	R616	1-216-393-00	METAL OXIDE	2.2 5% 3W F
R525	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R617	1-249-405-11	CARBON	100 5% 1/4W F
R526	1-216-089-00	RES,CHIP	47K 5% 1/10W	R619	1-216-065-00	RES,CHIP	4.7K 5% 1/10W
R527	1-216-077-00	RES,CHIP	15K 5% 1/10W	R622	1-249-401-11	CARBON	47 5% 1/4W
R528	1-216-246-00	RES,CHIP	100K 5% 1/8W	R627	1-249-389-11	CARBON	4.7 5% 1/4W F
R529	1-216-073-00	RES,CHIP	10K 5% 1/10W	R628	1-247-791-91	CARBON	22 5% 1/4W
R530	1-216-085-00	RES,CHIP	33K 5% 1/10W	R652	1-216-393-00	METAL OXIDE	2.2 5% 3W F
R531	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R653	1-216-393-00	METAL OXIDE	2.2 5% 3W F
R532	1-216-063-91	RES,CHIP	3.9K 5% 1/10W	R658	1-215-929-11	METAL OXIDE	100K 5% 3W F
R533	1-216-073-71	RES,CHIP	10K 5% 1/10W	R659	1-216-383-21	METAL OXIDE	0.33 5% 3W F
R534	1-216-105-91	RES,CHIP	220K 5% 1/10W	R660	1-216-384-21	METAL OXIDE	0.39 5% 3W F
R535	1-216-109-00	RES,CHIP	330K 5% 1/10W	R661	1-247-843-91	CARBON	3.3K 5% 1/4W
R539	1-216-049-00	RES,CHIP	1K 5% 1/10W	R662	1-215-929-11	METAL OXIDE	100K 5% 3W F
R540	1-215-861-21	METAL OXIDE	47 5% 1W F	R664	1-249-417-11	CARBON	1K 5% 1/4W
R541	1-216-097-00	RES,CHIP	100K 5% 1/10W	R665	1-215-877-11	METAL OXIDE	22K 5% 1W F
R542	1-216-089-00	RES,CHIP	47K 5% 1/10W	R667	1-215-927-00	METAL OXIDE	47K 5% 3W F
R543	1-216-089-00	RES,CHIP	47K 5% 1/10W	< VARIABLE RESISTOR >			
R546	1-249-401-11	CARBON	47 5% 1/4W F	RV101	1-241-765-11	RES, ADJ, CARBON 22K (KV-25X5B)	
R547	1-535-143-71	LEAD, JUMPER (7.5MM)		< RELAY >			
R548	1-216-397-11	METAL OXIDE	4.7 5% 3W F	RY601 Δ 1-755-245-11	RELAY, AC POWER		
R549	1-216-341-11	METAL OXIDE	0.22 5% 1W F	< SWITCH >			
R551	1-215-873-21	METAL OXIDE	4.7K 5% 1W F	SW532	1-572-707-11	SWITCH, LEVER	
R552	1-216-061-00	RES,CHIP	3.3K 5% 1/10W	< TRANSFORMER >			
R553	1-249-381-11	CARBON	1 5% 1/4W F	T511 Δ 1-453-264-11	TRANSFORMER ASSY, FLYBACK (NX-1680/U2B4)		
R571	1-249-417-11	CARBON	1K 5% 1/4W F	T531	1-437-195-11	TRANSFORMER, HORIZONTAL DRIVE	
R572	1-216-369-00	METAL OXIDE	1 5% 2W F	T532	1-431-228-11	TRANSFORMER, POWER MODULATION	
R573	1-216-097-00	RES,CHIP	100K 5% 1/10W	T601 Δ 1-427-962-11	TRANSFORMER, LINE FILTER		
R574	1-216-065-00	RES,CHIP	4.7K 5% 1/10W	T602	1-431-732-11	TRANSFORMER, CONVERTER (SRT)	
R575	1-216-097-00	RES,CHIP	100K 5% 1/10W	T603 Δ 1-431-777-11	TRANSFORMER, CONVERTER		
R576	1-249-399-11	RES,CHIP	33K 5% 1/10W	< THERMISTOR >			
R581	1-216-089-00	RES,CHIP	47K 5% 1/10W	THP601 Δ 1-810-961-11	THERMISTOR, POSITIVE		
R582	1-216-089-00	RES,CHIP	47K 5% 1/10W				
R583	1-216-081-00	RES,CHIP	22K 5% 1/10W				
R588	1-216-053-00	RES,CHIP	1.5K 5% 1/10W				
R589	1-216-097-00	RES,CHIP	100K 5% 1/10W				
R590	1-216-081-00	RES,CHIP	22K 5% 1/10W				
R591	1-215-892-11	METAL OXIDE	1K 5% 2W F				
R593	1-249-439-11	CARBON	68K 5% 1/4W				
R594	1-216-057-00	RES,CHIP	2.2K 5% 1/10W				
R602	1-202-961-11	CEMENTED	1.8 5% 10W				



The components identified by shading and marked Δ are critical for safety
Replace only with the part number specified.

REF. NO.	PART. NO	DESCRIPTION	REMARK	REF. NO.	PART. NO	DESCRIPTION	REMARK
< TUNER >				D711	1-216-349-51	METAL OXIDE 1	5% 1W
TU101	1-693-418-11	TUNER (TELE9-001A)	(KV-25X5A/25X5B/ KV-25X5D/25X5L)	D714	8-719-991-33	DIODE 1SS133T-77	
	8-598-432-00	TUNER (BTP-AC411)	(KV-25X5E/25X5K)	D715	8-719-991-33	DIODE 1SS133T-77	
	8-598-361-00	TUNER (BTP-AC402)	(KV-25X5R)	D716	8-719-991-33	DIODE 1SS133T-77	
	8-598-464-01	TUNER (BTP-AU611)	(KV-25X5U)	D717	8-719-991-33	DIODE 1SS133T-77	
< CRYSTAL >				D718	8-719-991-33	DIODE 1SS133T-77	
X001	1-578-774-11	VIBRATOR, CRYSTAL		D719	8-719-991-33	DIODE 1SS133T-77	
X302	1-567-505-11	OSCILLATOR, CRYSTAL		< CRT SOCKET >			
X303	1-567-504-11	OSCILLATOR, CRYSTAL		J701	Δ 1-526-990-21	SOCKET, CRT	
*****				< COIL >			
*A-1638-111-A C BOARD COMPLETE				L704	1-408-609-41	INDUCTOR 33UH	
*****				< TRANSISTOR >			
< CAPACITOR >				Q702	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C701	1-102-114-00	CERAMIC 470PF	10% 50V	Q703	8-729-906-70	TRANSISTOR BF871-127	
C702	1-102-115-00	CERAMIC 560PF	10% 50V	Q704	8-729-200-17	TRANSISTOR BF421L-AMMO	
C703	1-102-116-00	CERAMIC 680PF	10% 50V	Q705	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C708	1-162-114-00	CERAMIC 0.0047MF	2KV	Q706	8-729-906-70	TRANSISTOR BF871-127	
C710	1-107-652-11	ELECT 10MF	20% 250V	Q707	8-729-200-17	TRANSISTOR BF421L-AMMO	
C711	1-102-114-00	CERAMIC 470PF	10% 50V	Q708	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C712	1-102-116-00	CERAMIC 680PF	10% 50V	Q709	8-729-906-70	TRANSISTOR BF871-127	
C714	1-126-967-11	ELECT 47MF	20% 16V	Q710	8-729-200-17	TRANSISTOR BF421L-AMMO	
C717	1-102-114-00	CERAMIC 470PF	10% 50V	< RESISTOR >			
C718	1-102-114-00	CERAMIC 470PF	10% 50V	R701	1-247-895-91	CARBON 470K 5%	1/4W
C719	1-102-114-00	CERAMIC 470PF	10% 50V	R704	1-216-486-00	METAL OXIDE 8.2K 5%	3W F
C722	1-101-880-00	CERAMIC 47PF	5% 50V	R705	1-260-103-11	CARBON 2.2K 5%	1/2W
C723	1-101-880-00	CERAMIC 47PF	5% 50V	R706	1-247-815-91	CARBON 220 5%	1/4W
C724	1-101-880-00	CERAMIC 47PF	5% 50V	R707	1-247-815-91	CARBON 220 5%	1/4W
< CONNECTOR >				R708	1-247-791-91	CARBON 22 5%	1/4W
CN701	1-784-633-11	PIN, CONNECTOR 4P		R709	1-202-844-00	SOLID 330K 10%	1/2W
CN702	1-695-915-11	TAB (CONTACT)		R711	1-247-843-11	CARBON 3.3K 5%	1/4W
CN703	*1-564-509-11	PLUG, CONNECTOR 6P		R712	1-260-103-11	CARBON 2.2K 5%	1/2W
< DIODE >				R713	1-247-875-91	CARBON 68K 5%	1/4W
D702	8-719-991-33	DIODE 1SS133T-77		R714	1-216-486-00	METAL OXIDE 8.2K 5%	3W F
D703	8-719-991-33	DIODE 1SS133T-77		R715	1-249-417-11	CARBON 1K 5%	1/4W
D704	8-719-991-33	DIODE 1SS133T-77		R716	1-247-815-91	CARBON 220 5%	1/4W
D705	8-719-991-33	DIODE 1SS133T-77		R717	1-247-815-91	CARBON 220 5%	1/4W
D706	8-719-991-33	DIODE 1SS133T-77		R718	1-202-814-11	SOLID 33K 10%	1/2W
D707	8-719-991-33	DIODE 1SS133T-77		R719	1-247-791-91	CARBON 22 5%	1/4W
D708	8-719-991-33	DIODE 1SS133T-77		R720	1-247-843-11	CARBON 3.3K 5%	1/4W
D709	8-719-991-33	DIODE 1SS133T-77		R722	1-202-848-00	SOLID 680K 10%	1/2W
D710	8-719-991-33	DIODE 1SS133T-77		R723	1-249-417-11	CARBON 1K 5%	1/4W
				R724	1-260-131-11	CARBON 470K 5%	1/2W

The components identified by shading and marked Δ are critical for safety
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KV-25X5

C

H1

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
R726	1-260-103-11	CARBON	2.2K 5% 1/2W	< DIODE >			
R727	1-247-815-91	CARBON	220 5% 1/4W	D901	8-719-302-45	DIODE SEL1210S-CD	
R728	1-216-351-00	METAL OXIDE	1.5 5% 1W F		*4-203-258-01	HOLDER, LED (D901)	
R729	1-247-815-91	CARBON	220 5% 1/4W	D902	8-719-929-15	DIODE HZS9.1NB2	
R730	1-247-791-91	CARBON	22 5% 1/4W	D903	8-719-929-15	DIODE HZS9.1NB2	
R731	1-247-843-11	CARBON	3.3K 5% 1/4W	D904	8-719-109-97	DIODE RD6.8ES-B2	
R733	1-247-823-91	CARBON	470 5% 1/4W	D905	8-719-109-97	DIODE RD6.8ES-B2	
R734	1-247-807-31	CARBON	100 5% 1/4W	D906	8-719-923-60	DIODE MTZJ-T-77-9.1A	
R735	1-247-823-91	CARBON	470 5% 1/4W	D907	8-719-923-60	DIODE MTZJ-T-77-9.1A	
R736	1-216-486-00	METAL OXIDE	8.2K 5% 3W F	D908	8-719-923-60	DIODE MTZJ-T-77-9.1A	
R737	1-247-891-91	CARBON	330K 5% 1/4W	< FUSE >			
R739	1-249-417-11	CARBON	1K 5% 1/4W	F601	1-576-232-21	FUSE (H.B.C.) 5AMP 250V	
R740	1-247-823-91	CARBON	470 5% 1/4W		*1-533-725-11	HOLDER, FUSE (F601)	
R741	1-202-549-00	SOLID	100 20% 1/2W	< IC >			
R744	1-249-421-11	CARBON	2.2K 5% 1/4W	IC900	8-742-014-11	HYB IC SBX1981-51	
R745	1-249-421-11	CARBON	2.2K 5% 1/4W	< JACK SOCKET >			
R746	1-249-421-11	CARBON	2.2K 5% 1/4W	J900	1-764-606-11	JACK	
< VARIABLE RESISTOR >				< COIL >			
RV701	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M		L900	1-412-533-21	INDUCTOR 47UH	
RV702	1-241-656-21	RES, ADJ, METAL FILM 110M		L901	1-412-533-21	INDUCTOR 47UH	
*****				L902	1-408-603-31	INDUCTOR 10UH	
*A-1646-157-A H1 BOARD COMPLETE				L903	1-408-603-31	INDUCTOR 10UH	
*****				< RESISTOR >			
< CAPACITOR >				R900	1-247-807-31	CARBON 100 5% 1/4W	
C902	1-137-372-11	FILM	0.022MF 5% 50V	R901	1-249-426-11	CARBON 5.6K 5% 1/4W	
C903	1-137-372-11	FILM	0.022MF 5% 50V	R902	1-249-437-11	CARBON 47K 5% 1/4W	
C904	1-104-665-11	ELECT	100MF 20% 25V	R903	1-260-091-11	CARBON 220 5% 1/2W	
C905	1-126-964-11	ELECT	10MF 20% 50V	R904	1-260-091-11	CARBON 220 5% 1/2W	
C907	1-126-960-11	ELECT	1MF 20% 50V	R908	1-249-401-11	CARBON 47 5% 1/4W	
C908	1-126-960-11	ELECT	1MF 20% 50V	R909	1-247-895-91	CARBON 470K 5% 1/4W	
C911	1-102-074-00	CERAMIC	0.001MF 10% 50V	R910	1-247-895-91	CARBON 470K 5% 1/4W	
C912	1-102-074-00	CERAMIC	0.001MF 10% 50V	R911	1-535-465-11	LEAD, JUMPER (5.0MM)	
< CONNECTOR >				R912	1-249-422-11	CARBON 2.7K 5% 1/4W	
CN603	*1-580-844-11	PIN, CONNECTOR (POWER)		R913	1-249-429-11	CARBON 10K 5% 1/4W	
CN604	*1-695-292-11	PIN, CONNECTOR (POWER)		R914	1-247-863-91	CARBON 22K 5% 1/4W	
CN900	1-779-947-12	TERMINAL BLOCK, S		< SWITCH >			
CN906	*1-564-511-11	PLUG, CONNECTOR 8P		S601	*1-571-433-21	SWITCH, PUSH (AC POWER)	
CN907	*1-564-510-11	PLUG, CONNECTOR 7P		S900	1-692-979-21	SWITCH, TACTILE	
CN908	*1-564-508-11	PLUG, CONNECTOR 5P		S901	1-692-979-21	SWITCH, TACTILE	
				S902	1-692-979-21	SWITCH, TACTILE	

S1

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
	*A-1652-053-A	S1 BOARD COMPLETE (KV-25X5A/25X5D/25X5R) *****		C1150	1-126-960-11	ELECT 1MF 20% 50V	
	*A-1652-056-A	S1 BOARD COMPLETE (KV-25X5B) *****		C1151	1-104-664-11	ELECT 47MF 20% 25V	
	*A-1652-052-A	S1 BOARD COMPLETE (KV-25X5E/25X5K/ ***** KV-25X5L/25X5U)		C1152	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
	< CAPACITOR >				< FILTER >		
C1103	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	CF1101	1-409-327-00	TRAP, CERAMIC (6.5MHZ) (KV-25X5B)	
C1106	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V		< CONNECTOR >		
C1107	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	CN1101	1-766-925-11	CONNECTOR, BOARD TO BOARD 18P	
C1108	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V		< DIODE >		
C1109	1-104-664-11	ELECT 47MF 20% 25V		D1101	8-216-295-00	SHORT 0 (KV-25X5A/25X5D/25X5R)	
C1112	1-163-001-11	CERAMIC CHIP 220PF	10% 50V		8-719-066-72	DIODE BB135 (KV-25X5B/25X5E/25X5K/ KV-25X5L/25X5U)	
C1113	1-104-664-11	ELECT 47MF 20% 25V			< FERRITE BEAD >		
C1114	1-163-001-11	CERAMIC CHIP 220PF	10% 50V	FB1101	1-410-396-41	FERRITE 0.45UH	
C1115	1-104-664-11	ELECT 47MF 20% 25V		FB1102	1-410-396-41	FERRITE 0.45UH	
C1118	1-162-637-11	CERAMIC CHIP 0.47MF	16V	FB1103	1-410-396-41	FERRITE 0.45UH	
C1120	1-164-005-11	CERAMIC CHIP 0.47MF	25V	FB1104	1-410-396-41	FERRITE 0.45UH	
C1122	1-104-664-11	ELECT 47MF 20% 25V		FB1105	1-410-396-41	FERRITE 0.45UH	
C1123	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	FB1110	1-412-002-31	INDUCTOR CHIP 4.7UH	
C1124	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	FB1111	1-412-004-31	INDUCTOR CHIP 6.8UH (KV-25X5A/25X5D/25X5R)	
C1127	1-163-235-11	CERAMIC CHIP 22PF	5% 50V		1-412-002-31	INDUCTOR CHIP 4.7UH (KV-25X5B/25X5E/25X5K/ KV-25X5L/25X5U)	
		(KV-25X5A/25X5D/25X5R)		FB1112	1-412-002-31	INDUCTOR CHIP 4.7UH	
	1-163-239-11	CERAMIC CHIP 33PF	5% 50V	FB1113	1-412-002-31	INDUCTOR CHIP 4.7UH (KV-25X5B)	
		(KV-25X5B/25X5E/25X5K/25X5L/25X5U)			< IC >		
C1128	1-163-239-11	CERAMIC CHIP 33PF	5% 50V	IC1101	8-759-522-62	IC TDA9870 (KV-25X5A/25X5D/25X5R)	
C1129	1-163-989-11	CERAMIC CHIP 0.033MF	10% 25V		8-759-466-48	IC TDA9875P (KV-25X5B/25X5E/25X5K/ KV-25X5L/25X5U)	
		(KV-25X5B/25X5E/25X5K/25X5L/25X5U)		IC1102	8-759-998-98	IC LM358D (KV-25X5A/25X5D/25X5R)	
C1130	1-110-501-11	CERAMIC CHIP 0.33MF	10% 16V		8-759-100-96	IC UPC4558G2 (KV-25X5B/25X5E/25X5K/ KV-25X5L/25X5U)	
		(KV-25X5B/25X5E/25X5K/25X5L/25X5U)		IC1103	8-759-394-57	IC PST593C-MMP-4P	
C1131	1-164-005-11	CERAMIC CHIP 0.47MF	25V		< COIL >		
		(KV-25X5A/25X5B/25X5D/25X5R)		L1101	1-408-596-31	INDUCTOR 2.7UH (KV-25X5B/25X5E/25X5K/ KV-25X5L/25X5U)	
C1132	1-104-664-11	ELECT 47MF 20% 25V		L1113	1-408-600-31	INDUCTOR 5.6UH (KV-25X5B)	
C1133	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	L1114	1-410-671-31	INDUCTOR 47UH	
C1135	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	L1115	1-408-599-31	INDUCTOR 4.7UH	
		(KV-25X5B)		L1116	1-408-599-31	INDUCTOR 4.7UH	
C1137	1-104-664-11	ELECT 47MF 20% 25V		L1117	1-410-671-31	INDUCTOR 47UH (KV-25X5B)	
		(KV-25X5B)					
C1138	1-163-109-00	CERAMIC CHIP 47PF	5% 50V				
		(KV-25X5B)					
C1143	1-163-005-11	CERAMIC CHIP 470PF	10% 50V				
C1144	1-163-005-11	CERAMIC CHIP 470PF	10% 50V				
C1145	1-163-077-00	CERAMIC CHIP 0.1MF	10% 25V				
C1146	1-164-005-11	CERAMIC CHIP 0.47MF	25V				
C1147	1-164-005-11	CERAMIC CHIP 0.47MF	25V				
C1148	1-164-005-11	CERAMIC CHIP 0.47MF	25V				
C1149	1-126-960-11	ELECT 1MF 20% 50V					

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
< TRANSISTOR >				R1168	1-216-033-00	RES,CHIP 220 5%	1/10W (KV-25X5B)
Q1112	8-729-620-06	TRANSISTOR 2SC3052-EF (KV-25X5B)		R1169	1-216-049-00	RES,CHIP 1K 5%	1/10W (KV-25X5B)
Q1113	8-729-620-06	TRANSISTOR 2SC3052-EF (KV-25X5B)		R1170	1-216-001-00	RES,CHIP 10 5%	1/10W (KV-25X5B)
Q1114	8-729-216-22	TRANSISTOR 2SA1162-G (KV-25X5B)		R1171	1-216-045-00	RES,CHIP 680 5%	1/10W (KV-25X5B)
Q1115	8-729-620-06	TRANSISTOR 2SC3052-EF (KV-25X5B)		R1172	1-216-190-00	RES,CHIP 470 5%	1/8W (KV-25X5B)
< RESISTOR >				R1173	1-216-049-00	RES,CHIP 1K 5%	1/10W (KV-25X5B)
JR1105	1-216-295-00	SHORT 0		R1174	1-216-085-00	RES,CHIP 33K 5%	1/10W
JR1112	1-216-295-71	CONDUCTOR CHIP		R1175	1-216-085-00	RES,CHIP 33K 5%	1/10W
JR1113	1-216-295-71	CONDUCTOR CHIP		R1176	1-216-085-00	RES,CHIP 33K 5%	1/10W
R1101	1-216-073-00	RES,CHIP 10K 5%	1/10W	R1177	1-216-085-00	RES,CHIP 33K 5%	1/10W
R1102	1-216-073-00	RES,CHIP 10K 5%	1/10W	R1178	1-216-073-71	RES,CHIP 10K 5%	1/10W
R1103	1-216-035-00	RES,CHIP 270 5%	1/10W	< CRYSTAL >			
R1105	1-216-035-00	RES,CHIP 270 5%	1/10W	X1101	1-767-813-21	VIBRATOR, CRYSTAL	
R1108	1-216-057-00	RES,CHIP 2.2K 5%	1/10W	*****			
		(KV-25X5A/25X5B/25X5D/25X5R)					
R1110	1-216-025-00	RES,CHIP 100 5%	1/10W				
R1111	1-216-025-00	RES,CHIP 100 5%	1/10W				
R1113	1-216-073-00	RES,CHIP 10K 5%	1/10W				
R1116	1-216-295-00	SHORT 0	(KV-25X5A/25X5D/25X5R)				
	1-216-689-11	METAL CHIP 39K 0.50%	1/10W				
		(KV-25X5B/25X5E/25X5K/25X5L/25X5U)					
R1117	1-216-073-00	RES,CHIP 10K 5%	1/10W				
		(KV-25X5B/25X5E/25X5K/25X5L/25X5U)					
R1118	1-216-682-11	METAL CHIP 20K 0.50%	1/10W				
		(KV-25X5B/25X5E/25X5K/25X5L/25X5U)					
R1121	1-216-065-71	RES,CHIP 4.7K 5%	1/10W				
R1122	1-216-065-71	RES,CHIP 4.7K 5%	1/10W				
R1123	1-216-065-71	RES,CHIP 4.7K 5%	1/10W				
R1124	1-216-073-71	RES,CHIP 10K 5%	1/10W				
R1125	1-216-065-71	RES,CHIP 4.7K 5%	1/10W				
R1126	1-216-073-71	RES,CHIP 10K 5%	1/10W				
R1130	1-216-073-00	RES,CHIP 10K 5%	1/10W				
		(KV-25X5A/25X5D/25X5R)					
R1134	1-216-073-00	RES,CHIP 10K 5%	1/10W				
		(KV-25X5A/25X5D/25X5R)					
R1152	1-216-035-00	RES,CHIP 270 5%	1/10W (KV-25X5B)				
R1153	1-216-025-00	RES,CHIP 100 5%	1/10W (KV-25X5B)				
R1154	1-216-067-00	RES,CHIP 5.6K 5%	1/10W (KV-25X5B)				
R1160	1-216-230-00	RES,CHIP 22K 5%	1/8W (KV-25X5B)				
R1161	1-216-190-00	RES,CHIP 470 5%	1/8W (KV-25X5B)				
R1162	1-216-061-00	RES,CHIP 3.3K 5%	1/10W (KV-25X5B)				
R1163	1-216-230-00	RES,CHIP 22K 5%	1/8W (KV-25X5B)				
R1164	1-216-073-00	RES,CHIP 10K 5%	1/10W				
		(KV-25X5B/25X5E/25X5K/25X5L/25X5U)					
R1165	1-216-295-00	SHORT 0	(KV-25X5A/25X5D/25X5R)				
R1167	1-216-025-00	RES,CHIP 100 5%	1/10W (KV-25X5B)				

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
< MISCELLANEOUS > *****				REMOTE COMMANDER *****			
	Δ 1-406-806-21	COIL, DEMAGNETIZATION					
	1-452-032-00	MAGNET, DISC; 10MM \emptyset			1-475-765-11	COMMANDER STANDARD TYPE (RM-883)	
	1-452-094-00	MAGNET, ROTATABLE DISC; 15MM \emptyset		*****			
	Δ 1-453-264-11	TRANSFORMER ASSY, FLYBACK (NX1680-U2B4)					
	1-503-902-11	SPEAKER (15X6.5CM)					
	Δ 1-571-433-21	SWITCH, PUSH (AC POWER)					
	Δ 1-756-286-11	CORD, POWER (KV-25X5A/25X5B/25X5D/25X5E/ KV-25X5K/25X5R/25X5U)					
	Δ 1-776-860-11	CORD, POWER FILTER (UK) (KV-25X5L)					
	1-693-418-11	TUNER (TELE9-001A) (KV-25X5A/25X5B/25X5D/ KV-25X5L)					
	8-598-432-00	TUNER (BTP-AC411) (KV-25X5E/25X5K)					
	8-598-361-01	TUNER (BTP-AC402) (KV-25X5R)					
	8-598-464-01	TUNER (BTP-AU611) (KV-25X5U)					
	Δ 8-733-254-05	PICTURE TUBE (SD-257) (M60LCS60X)					
	Δ 8-451-404-23	DEFLECTION YOKE (Y25GXABA)					
	Δ 8-733-254-76	ITC					

ACCESSORIES AND PACKAGING MATERIALS *****							
	*4-042-476-01	BAG, PROTECTION					
	*4-204-034-01	INDIVIDUAL CARTON					
	*4-204-035-01	CUSHION (UPPER) (ASSY)					
	*4-204-036-01	CUSHION (LOWER) (ASSY)					
	4-204-043-41	MANUAL, INSTRUCTION (KV-25X5A) (ITALIAN)					
	4-204-043-51	MANUAL, INSTRUCTION (KV-25X5B) (FRENCH/GERMAN/ITALIAN/DUTCH)					
	4-204-074-11	MANUAL, INSTRUCTION (KV-25X5D) (GERMAN/GREEK/DUTCH/ ENGLISH/TURKISH)					
	4-204-043-71	MANUAL, INSTRUCTION (KV-25X5E) (SPANISH)					
	4-204-043-81	MANUAL, INSTRUCTION (KV-25X5E) (FINNISH/NORWEGIAN/HUNGARIAN/ PORTUGUESE/DANISH/SWEDISH)					
	4-204-043-61	MANUAL, INSTRUCTION (KV-25X5L/25X5U) (ENGLISH)					
	4-204-074-91	MANUAL, INSTRUCTION (KV-25X5K) (CZECH/ENGLISH/POLISH/HUNGARIAN)					
	4-204-074-91	MANUAL, INSTRUCTION (KV-25X5R) (RUSSIAN/BULGARIAN/ENGLISH)					

